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Result
No.
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein - protein search, using sw model
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
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1: /cgn2_6/ptodata/1/iaa/5_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/H_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
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            GenCore version (c) 1993 - 2006
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US-08-2464-590A-17

US-08-207-412B-12

US-08-867-471-2

US-08-867-471-2

US-08-438-439C-8

US-08-718-904-14

US-09-9093-585-17

US-09-368-951-33

US-09-349-249-14

US-09-390-207-20

US-09-29-947-33

US-09-27-406B-11

US-09-240-952-3

US-09-345-373-15

US-09-345-373-15

US-09-345-373-15

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US-09-13-079-13
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Sequence 12, Appl
Sequence 17, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 33, Appl
Sequence 14, Appl
Sequence 20, Appl
Sequence 21, Appl
Sequence 11, Appl
Sequence 15, Appl
Sequence 11, Appl
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11	13	15	15	27	39	50	90	119	151	151	151	172	172	172	172	172	182
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15	13	19	15	27	121	266	264	123	268	268	266	219	219	219	219	219	267
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US-09-537-817B-2	US-09-537-817B-9	US-09-537-817B-10	US-09-537-817B-1	US-08-290-373B-6	US-08-822-573-4	5175383-5	US-09-390-207-30	US-08-822-573-2	US-09-490-714-14	US-08-705-245-14	US-09-417-721-9	PCT-US95-09172-13	US-10-016-447-13	US-09-507-773-13	US-08-776-207-13	US-08-441-629-13	US-09-564-829-7
2	Sequence 9, Appli	Sequence 10, Appl	Sequence 1, Appli	Sequence 6, Appli	Sequence 4, Appli	Patent No. 5175383	Sequence 30, Appl	Sequence 2, Appli	Sequence 14, Appl	Sequence 14, Appl	Sequence 9, Appli	Sequence 13, Appl	Sequence 13, Appl	Sequence 13, Appl	Sequence 13, Appl	•	Sequence 7, Appli

ALIGNMENTS

Title:

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US-08-439-725A-12
                                                                                                                                                                                                                                                                                CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 0726:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
TELEPAX: 617/678-5099
INFORMATION FOR SEQ ID NO: 12:
                                                                    Query Match
Best Local Similarity
Matches 268; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 268 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Nathans, Jeremy
APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jenilip M.
APPLICANT: Macke, Jenilip M.
TITLE OF INVENTION: FIREOBROBLAST GROWTH FACTOR HOMOLOGOUS
TITLE OF INVENTION: FACTOR-1 (FHF-1) AND METHODS OF USB
NUMBER OF SEQUENCES: 15
                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
CITY: L
STATE:
                                                                                                                                                                                        STRANDEDNESS: not
TOPOLOGY: linear
                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/01
FILING DATE: 12-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T: 4225 Ex
MSLSFILLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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                                                                          Conservative
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100.0%; Pred. No. 6.6e-244;
tive 0; Mismatches 0;
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                                                                                                              Length
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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-464-590A-17
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US-08-464-590A-17
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GENERAL INFORMATION:
                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (201) 994-1700
TELEFAX: (201) 994-1744
INFORMATION FOR SEQ ID NO: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION WISHER: US/08/464,590A
FILING DATE: 05-UN-1995
CLASSIFICATION: 536
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: HU, JING-SHAN
APPLICANT: ROSEN, CRAIG A.
TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR-11
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: MULLINS, J. G.
REGISTRATION NUMBER: 30,073
REFERENCE/DOCKET NUMBER: 32
                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
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CITY: ROSELAND
STATE: NJ
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI, ADDRESSEE: STEWART & OLSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 07068
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                                       61
                                                                61 SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
                                                                                                                                                                                                   268;
                                                                                                                                           1 MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR 180
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                                     SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
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100.0%; Pred. No. 6.6e-244;
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RESULT 3
US-08-207-412B-12
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GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: FETTATO, Gregory D
REGISTRATION NUMBER: 36,114
REFERENCE/DOCKET NUMBER: 3258
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201994-1700
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CORRESPONDENCE ADDRESS:
ADDRESSES:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM CC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
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Local Similarity 100.0%; Pred. No. 6.6e-244;
nes 268; Conservative 0; Mismatches 0;
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ZIP: 07068-1739
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi, ADDRESSEE: Stewart & Olstein STREET: 6 Becker Farm Road
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CLASSIFICATION DATA:
APPLICATION NUMBER: 08/439,725
FILING DATE: 12-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Liea A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/0
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
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Patent No. 5
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/867,471
FILING DATE: 02-JUN-1997
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APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jennifer P.
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CORRESPONDENCE ADDRESS:
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CITY: 1
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STRANDEDNESS: not
TOPOLOGY: linear
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SPIKSKIPLSAPRKNTNSVKYRLKFRFG 268
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4225 Executive Square, Suite
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nilarity 100.0%;
Conservative 0;
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US-08-438-439C-8
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Best Local Similarity
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TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO: 8:
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APPLICANT: Nathan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: May 12, 1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 0726
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/438,43
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APPLICANT: Macke, Jennifer P.
TITLE OF INVENTION: FIRSTOROBLAST GROWTH FACTOR
TITLE OF INVENTION: FACTOR-2 AND METHODS OF USE
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ADDRESSEE: Fish & Ri
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: not
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                     241 SPIKSKIPLSAPRKNTNSVKYRLKFRFG 268
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                                                                                            TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP 240
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                                                                       TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP
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Smallwood, Phillip M.
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25 Executive Square, Suite 1400
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100.0%; Pred. No. 6.6e-244;
tive 0; Mismatches 0;
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RESULT 6 US-08-951-822-33

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RESULT 7
US-08-718-904-14
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APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Fenella
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Hansen, Birgit
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14,
Patent No. 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 268; Conservative
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CURRENT FILING DATE: 1997-10-16
NUMBER OF SEQ ID NOS: 36
                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                        APPLICANT: Baird, J. Andrew
APPLICANT: Chandler, Lois Ann
APPLICANT: Sosnowski, Barbara A.
APPLICANT: Sosnowski, Barbara A.
TITLE OF INVENTION: COMPOSITIONS CONTAINING NUCLEIC ACIDS AND LIGANDS FOR THERAPE
                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                            STREET: 6300 COCITY: Seattle STATE: Washings COUNTRY: USA ZIP: 98104-709:
APPLICATION NUMBER: US/08/718,904 FILING DATE: 24-SEP-1996 CLASSIFICATION: 424
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6037329
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                                                                                                                                                                                                                   Washington
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                                                                                                                                                                                                                                                              6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                SEED and BERRY LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 268; DB 1; 1 100.0%; Pred. No. 6.6e-244;
                                                                                                                                                                                                                                                                                                                       128
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US-09-093-585-17
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Patent No. 6110893
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COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Ve:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/093,585
FILING DATE:
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/464,590
FILING DATE: 05-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 268 amino acide
TYPE: amino acide
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REFERENCE/DOCKET NUMBER: 76
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                         COUNTRY: US
ZIP: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: HU, JING-SHAN
APPLICANT: ROSEN, CRAIG A.
TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR-11
NUMBER OF SEQUENCES: 17
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CITY: ROSELAND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: /note= "FGF-5"
                                                                                                                                                                                                                                                                                        STATE:
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Local Similarity 100.0%;
es 268; Conservative 0
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                                                                                                                                                                                                                                                                                                                           6 BECKER FARM ROAD
                                                                                                                                                                                                           Floppy disk
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Pred. No. 6.6e-244;
D; Mismatches 0; Indels
                                                                                                                                                        Version
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FILE REFERENCE: 96-20
CURRENT APPLICATION NUMBER: US/09/368,951
CURRENT FILING DATE: 1999-08-05
EARLIER APPLICATION NUMBER: 08/951,822
EARLIER FILING DATE: 1997-10-16
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 33
ENGTH: 268
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APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Fenella
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Holderman, Susan D.
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 30,073
REFERENCE/DOCKET NUMBER: 3258
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201) 994-1700
TELEPAX: (201) 994-1744
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
                                                                 Query Match
Best Local S
Matches 268
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Patent No. 635297
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Best Local Similarity
                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
-09-368-951-33
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                                                                                   Local Similarity
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STRANDEDNESS: sin
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              MSLSFILLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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                                                                   Conservative
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                                                               100.0%; Score 268; DB 2;
100.0%; Pred. No. 6.6e-244;
tive 0; Mismatches 0;
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; Pred. No. 6.6e-244;
0; Mismatches 0;
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OTHER INFORMATION: /note= "FGF-5"; SEQUENCE DESCRIPTION: SEQ ID NO: 14: US-09-449-249-14
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US-09-449-249-14
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Patent No. 6503886
GENERAL INFORMATION:
                                                                          Matches 268;
                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 14: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/718,904
FILING DATE: 24-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: NO. 6503886tenburg Ph.D., Carol
REGISTRATION NUMBER: 39,317
REFERENCE/DOCKET NUMBER: 760100.415C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-6900
TELEPAX: (206) 682-6031
                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/449,249
FILING DATE: 24-No. 6503886-1999
CLASSIFICATION: CURROWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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Sognowski, Barbara A.
TITLE OF INVENTION: COMPOSITIONS CONTAINING NUCLEIC ACIDS AND LIGANDS FOR THERU
NUMBER OF SEQUENCES: 128
                                                                                                                                                                                                                                MOLECULE TYPE:
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                  MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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MSLSFLLLLFFSHLTLSAWAHGEKRLAPKGQPGPAATDRNPTGSSSRQSSSSAMSSSSAS
                                                                                                                                                                                                                            STRANDEDNESS: single
TOPOLOGY: unknown
TULE TYPE: peptide
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                                                                                                                                                                                                                                                                                        TYPE: amino acid
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                                                                                                                                                                                                                                                                                                          LENGTH: 268 amino acids
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                                                                        100.0%; Score 268; DB 2; lilarity 100.0%; Pred. No. 6.6e-244; Conservative 0; Mismatches 0;
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; Sequence 33, Application US/09229947
; Patent No. 6518236
; GENERAL INFORMATION:
; APPLICANT: Deisher, Theresa A.
APPLICANT: Conklin, Darrell C.
; APPLICANT: Raymond, Fenella
; APPLICANT: Bukowski, Thomas R.
; APPLICANT: Holderman, Susan D.
; APPLICANT: Hansen, Birgit
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US-09-390-207-20
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CURRENT FILING DATE: 199-09-07
NUMBER OF SEQ ID NOS: 41
SOPTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
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Best Local Similarity
Matches 268; Conserv
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APPLICANT: Liu, Benxian
TITLE OF INVENTION: Fibroblast Growth Factor-Like Polypeptides
FILE REFERENCE: 99-371
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CURRENT APPLICATION NUMBER: US/09/572,406B

CURRENT FILING DATE: 2000-05-16

PRIOR APPLICATION NUMBER: 60/135,524

PRIOR FILING DATE: 1999-05-21

PRIOR APPLICATION NUMBER: 69/514,587

PRIOR APPLICATION NUMBER: 09/514,587

PRIOR PILING DATE: 1908-06-08

PRIOR PILING DATE: 1908-06-08

PRIOR APPLICATION NUMBER: 09/093,585

PRIOR PILING DATE: 1998-06-08

PRIOR APPLICATION NUMBER: 09/464,590

PRIOR APPLICATION NUMBER: 08/464,590

PRIOR TILING DATE: 1995-06-05

NUMBER OF SEQ ID NOS: 28

SOFTWARE: PATENTIN OF SEQ ID NOS: 28

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SOFTWARE: PATENTIN OF SEQ ID NOS: 28
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US-09-572-406B-11
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CURRENT APPLICATION NUMBER: US/09/229,947
CURRENT FILING DATE: 1999-01-13
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 268
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 11, Application US/09572406B Patent No. 6605441 GENERAL INFORMATION:
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Best Local Similarity 100.0%; Pred. No. 6.6e-244;
Matches 268; Conservative 0; Mismatches 0;
                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Alderson, Ralph et al. TITLE OF INVENTION: Fibroblast Growth Factor 11
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TITLE OF INVENTION: NOVEL FGF HOMOLOGS
                                                                                                                                                                                                                                        LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                     tch 100.0%; Score 268; DB 2; lal Similarity 100.0%; Pred. No. 6.6e-244; 268; Conservative 0; Mismatches 0;
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    61 SSPAASIGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
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US-09-240-952-5
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Best Local Similarity
Matches 226; Conserv
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MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/240,952
FILING DATE: 29-Jan-1999
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Kljavin, Ivar
APPLICANT: La Fleur, Monique
TITLE OF INVENTION: Method of Preventing the Death of Retinal
TITLE OF INVENTION: Neurons and Treating Ocular Diseases
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                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 247 amino acids
TYPE: amino acid
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ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Svoboda, Craig G. REGISTRATION NUMBER: 39, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                             TOPOLOGY: Linear
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RERFQENSYNTYASAIHRIEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS 222
                                                                                IYPDGKVNGSHEANMLSVLBIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF 162
                                                                                                                     GSSSRQSSSSAMSSSSAASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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100.0%; Pred. No. 1.9e-204;
htive 0; Mismatches 0;
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US-09-240-952-3
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Best Local Similarity 100.0%; Pred. No. 1.9e-204;
Matches 226; Conservative 0; Mismatches 0;
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GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
INTERPLICANT:
La Fleur, Monique
APPLICANT:
La Fleur, Monique
APPLICANT:
Neurons and Treating Ocular Diseases
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INFORMATION FOR SEQ ID NO: 3:
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PRIOR APPLICATION DATA:
PRIOR APPLICATION UNBER: 09/041,383
PILING DATE: 12-MAI-98
ATTORNEY/AGENT INFORMATION:
NAME: Svoboda, Craig G.
REGISTRATION UNMBER: 39,044
REFERENCE/DOCKET NUMBER: P1088P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinDatin (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 248 amino acids
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TELEPHONE: 650/225-1489
TELEPAX: 650/952-9881
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                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: Linear
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                        EQPELSFTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYRLKFRFG
                                                                              RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
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EQPELSFTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYRLKFRFG
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Search completed: April 11, 2006, 03:43:02 Job time : 21 secs

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Perfect score:
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seq length: 2000000000
Published Applications AA New:*

1: /SIDSS/ptodata/2/pubpaa/US08 NEW PUB.pep:*

2: /SIDSS/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /SIDSS/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

4: /SIDSS/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*

5: /SIDSS/ptodata/2/pubpaa/US09_NEW_PUB.pep:*

6: /SIDSS/ptodata/2/pubpaa/US11_NEW_PUB.pep:*

7: /SIDSS/ptodata/2/pubpaa/US11_NEW_PUB.pep:*

8: /SIDSS/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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268
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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45	44	43	42	41	40	39	38	37	36	ω 5	34 4	ω ω	32	31	30	29	28	27	0
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US-11-096-568A-18593	US-11-238-936-11	US-10-991-285-873	US-11-096-568A-17455	US-11-044-899-22	US-11-044-899-21	US-11-096-568A-12758	US-11-096-568A-7838	US-11-207-847-4	US-11-172-740-2378	US-11-096-568A-13393	US-10-523-362-22	US-11-004-399-2629	US-11-096-568A-7612	US-11-072-512-3422	US-10-510-386-138	US-11-150-054A-34	US-11-058-735-61	US-10-974-127A-59	00-T0-04T-004
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	peductice
18593, A	11, Appl	873, App	17455, A	22, Appl	21, Appl	12758, A	7838, Ap	4, Appli	2378, Ap	13393, A	22, Appl	2629, Ap	7612, Ap	3422, Ap	138, App	34, Appl	61, Appl	59, Appl	קיירי אלילי

ALIGNMENTS

RESULT 1 US-11-134-703-4

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; LENGTH: 268
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-134-703-4
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CURRENT APPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR PILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR PILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR FILING DATE: 2002-03-27
PRIOR PILING DATE: 2002-03-27
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 2000-09-29
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Best Local S
Matches 268
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Publication No. US20060009393A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/157,103 PRIOR FILING DATE: 1999-10-02
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                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
nes 268; Conserv
181
                        181 TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSBQPELSFTVTVPEKKNPP 240
                                                                                           121
                                                                                                                      121 LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR 180
                                                                                                                                                                                      61 SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
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                                                                                                                                                                                                                                                                                                          1 MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSPTVTVPEKKNPP
                                                                                           LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 268; DB 7; I larity 100.0%; Pred. No. 3.2e-247; Conservative 0; Mismatches 0;
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RESULT 3
US-11-134-703-12
; Sequence 12, Application US/11134703
; Publication No. US20060009393A1
; GENERAL INFORMATION:
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PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR APPLICATION NUMBER: 60/157,103
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Best Local Similarity
          APPLICANT: Hanada et al.

TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5
FILE REFERENCE: 67015-05
FILE REPERENCE: 67015-05
CURRENT APPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR FILING DATE: 2002-11-19
PRIOR FILING DATE: 2002-11-19
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PRIOR FILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
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CURRENT FILING DATE: 2005-05-19
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TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5
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ORGANISM: Homo sapiens
APPLICATION NUMBER: US 10/089,485
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100.0%; Pred. No. 2.5e-226;
rative 0; Mismatches 0;
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-134-703-12
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US-11-134-703-18
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US-11-134-703-18
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PRIOR PILLING DATE: 2003-11-19
PRIOR PILLING DATE: 2003-11-19
PRIOR PILLING DATE: 2002-11-19
PRIOR PILLING DATE: 2002-11-19
PRIOR PILLING DATE: 2002-03-27
PRIOR PILLING DATE: 2002-03-27
PRIOR PILLING DATE: 2002-03-27
PRIOR PILLING DATE: 2000-09-29
PRIOR PILLING DATE: 2000-09-29
PRIOR PILLING DATE: 2000-09-29
PRIOR PILLING DATE: 1999-10-02
PRIOR PILLING DATE: 1999-10-02
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SEQ ID NO 18
LENGTH: 268
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Best Local Similarity 100.0%; Pred. No. 7.8e-178;
Matches 195; Conservative 0; Mismatches 0;
                                                                                                                                                                            Matches
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PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR APPLICATION STATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5) FILE REFERENCE: 67015-05 CURRENT APPLICATION NUMBER: US/11/134,703 CURRENT FILING DATE: 2005-05-19
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Local Similarity 100.0%; Pred. No. 8.4e-178;
les 195; Conservative 0; Mismatches 0;
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103
                                                                                      43
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  IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                         IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                        ĠŚŚŚRÓŚSŚŚAMŚŚŚŚAŚSŚPAASLGSÓGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ 102
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RESULT 6
US-11-134-703-6
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; SEQ ID NO 15
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Human FGF-5
US-11-238-936-15
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US-11-238-936-15
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                                                                                                                                                                                                                                                                           Sequence 6, Application US/11134703
Publication No. US20060009393A1
GENERAL INFORMATION:
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APPLICANT: Hanada et al.

APPLICANT: HANADA et al.

APPLICANT: HANADA et al.

TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)

FILE REFERENCE: 67015-05

CURRENT APPLICATION NUMBER: US/11/134,703

CURRENT FILING DATE: 2005-05-19

PRIOR APPLICATION NUMBER: PCT/US2003/37065

PRIOR FILING DATE: 2003-11-19

PRIOR FILING DATE: 2002-11-19

PRIOR APPLICATION NUMBER: US 10/089,485

PRIOR FILING DATE: 2002-03-27

PRIOR FILING DATE: 2002-03-27

PRIOR FILING DATE: 2002-03-27

PRIOR FILING DATE: 2000-09-29
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APPLICANT: Whitehouse, Martha J.
APPLICANT: Kavanaugh, Michael W.
TITLE OF INVENTION: Angingenically Effective Unit Dose of FGF and Method
TITLE OF INVENTION: Administering
FILE REFERENCE: 1296/12169US05
CURRENT APPLICATION NUMBER: US/11/238,936
CURRENT APPLICATION NUMBER: US/09/417,721
PRIOR APPLICATION NUMBER: US/09/417,721
PRIOR PILING DATE: 1999-10-13
PRIOR PILING DATE: 1999-10-13
PRIOR PILING DATE: 1998-10-13
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                                                              RESULT 8
US-11-134-703-8
Sequence 8, Application US/11134703 Publication No. US20060009393A1 GENERAL INFORMATION:
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; TYPE: PRT
; ORGANISM: Human FGF-5
US-11-238-936-9
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APPLICANT: Kavanaugh, Michael W.
APPLICANT: Kavanaugh, Michael W.
TITLE OF INVENTION: Angiogenically Effective Un:
TITLE OF INVENTION: Administrating
FILE REFERENCE: 1296/12169US05
CURRENT APPLICATION NUMBER: US/11/238,936
CURRENT FILING DATE: 2005-09-29
PRIOR APPLICATION NUMBER: US/09/417,721
PRIOR APPLICATION NUMBER: 09/09/417,721
PRIOR APPLICATION NUMBER: 09/09/417,721
PRIOR FILING DATE: 1999-10-13
PRIOR FILING DATE: 1998-10-13
PRIOR FILING DATE: 1998-10-13
PRIOR FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 15
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Best Local Similarity 100.
Matches 176; Conservative
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PRIOR FILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 3.3
SEQ ID NO 6
                                                                                                                                                                                                                           Matches 151;
                                                                                                                                                                                                                                             Query Match
Best Local Similarity
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ORGANISM: Homo sapiens
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                                                                                              KGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRV
                                                                                                                                                                      RTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSK 146
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                                                                        KGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRV
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KPQHISTHFLPRFKQSEQPELSFTVTVPEKK 235
                                                                                                                                                                                                                          56.3%; Score 151; DB 7; Lilarity 100.0%; Pred. No. 5.8e-136; Conservative 0; Mismatches 0;
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100.0%; Pred. No. 6.7e-160;
htive 0; Mismatches 0;
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APPLICANT: Hanada et al

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                                                                                       ; ORGANISM: Homo sapiens
US-11-134-703-19
                                                                                                                                            NUMBER OF SEQ ID NOS: 4:
SOFTWARE: PatentIn Ver.
SEQ ID NO 19
LENGTH: 60
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Publication No. US20060009393A1
GENERAL INFORMATION:
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          Matches
                      Query Match
Best Local Similarity
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PRIOR APPLICATION NUMBER: DCT/US00/26689
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: DCT/US00/26689
PRIOR APPLICATION NUMBER: 2000-09-29
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PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 2000-09-29
                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Hanada et al.
TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5
FILE REFERENCE: 67015-05
CURRENT EPPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
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PRIOR FILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
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CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR FILING DATE: 2003-11-19
                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
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                                                                                                                                                                                                                          PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                              TYPE: PRT
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          60;
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          Conservative
22.4%; L
100.0%; Pre
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100.0%; Pred. No. 2e-130;
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                            Score 60;
Pred. No.
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                          DB 7; Le
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161 KFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFK 220

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; OTHER INFORMATION: Variant peptide sequence. US-11-134-703-38
                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR PELICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR PILING DATE: 2000-09-29
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 2000-09-29
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SOFTWARE: PatentIn Ver. 3
SEQ ID NO 37
LENGTH: 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 38, Application US/11134703 Publication No. US20060009393A1
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Best Local Similarity 100.0%; Pred. No.
Matches 52; Conservative 0; Mismatc
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                                                                                                                                                                 SEQ ID NO 38
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APPLICANT: HANAGA et al.

TITLE OF INVENTION: INMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)

PILE REFERENCE: 67015-05

CURRENT APPLICATION NUMBER: US/11/134,703

CURRENT FILING DATE: 2005-05-19

PRIOR FILING DATE: 2003-11-19

PRIOR FILING DATE: 2002-11-19

PRIOR APPLICATION NUMBER: US 60/427,920

PRIOR FILING DATE: 2002-11-19

PRIOR APPLICATION NUMBER: US 10/089,485

PRIOR PILING DATE: 2002-03-27

PRIOR APPLICATION NUMBER: PCT/US00/26689

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 2000-09-29
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TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)
FILE REFERENCE: 67015-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/157,103 PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                         SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 43
                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/157,103 PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/11/134,703
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ORGANISM: Artificial Sequence
FEATURE:
                                                 TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                     LENGTH: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161 KFRERPQENSYNTYASAIHRTEKTGREWYVALIKKRGKAKRGCSPRVKPQHIS 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 KFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHIS 52
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; TYPE: PRT; ORGANISM: Artificial Sequence; FEATURE: OTHER INFORMATION: Variant peptide sequence US-11-134-703-36
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US-11-134-703-36
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SOFTWARE: Pa
SEQ ID NO 32
LENGTH: 10
TYPE: PRT
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Best Local Similarity
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TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)

FILE REFERENCE: 67015-05

CURRENT APPLICATION UMBER: US/11/134,703

CURRENT FILING DATE: 2005-05-19

CURRENT FILING DATE: 2005-05-19
                                                                                                            PRIOR APPLICATION NUMBER: PCT/US00/2
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                                          PRIOR FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR FILING DATE: 2002-03-27
PRIOR FILING DATE: 2002-03-27
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PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR FILING DATE: 2000-09-29
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PRIOR FILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
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CURRENT APPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PCT/US2003/37065
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                                                                                             NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Hanada et al.
TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5
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                                                                                                                                                                APPLICATION NUMBER: PCT/US00/26689 FILING DATE: 2000-09-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173 TYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFK 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           172 NTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFK 220
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                                                                       PatentIn
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No. US20060009393A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17.9%; Score 48; DB 7; Lilarity 100.0%; Pred. No. 1.1e-38; Conservative 0; Mismatches 0;
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100.0%; Pred. No. 1.2e-39;
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US-11-096-568A-20771
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; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement; FILE REFERENCE: 38-21(53450) B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
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                                                                                                                                   US-11-096-568A-20771
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SEQ ID NO 20771
LENGTH: 413
TYPE: PRT
ORGANISM: Zea mays subsp. mays
                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Alexandrov, Nickolai et al.
TITLE OF INVENTION: Sequence-Determined
TITLE OF INVENTION: Therby
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SEQ ID NO 8568
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Best Local Similarity
Matches 10; Conserv
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Best Local Similarity 100.0%; Pred. No.
Matches 9; Conservative 0; Mismatcl
                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20771, Application US/11096568A Publication No. US20060048240A1
                                                                 Matches
                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/11/096,568A CURRENT FILING DATE: 2005-04-01
                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 2750-1592PUS2
                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (1)...(413)
OTHER INFORMATION: Ceres Seq. ID no. 12387083
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TYPE: PRT
                                                                                                                                                                                                   FEATURE:
243
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117 MLSVLBIFAV 126
                             55 SSSSASSSP 63
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SSSSASSSP
                                                                 Conservative
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251
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100.0%; Pred. No. 0.0035;
ative 0; Mismatches 0
                                                                               3.4%;
                                                                               Score 9; 1; Pred. No.
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                                                                 Mismatches
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                                                                               DB 7;
o. 0.94;
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                                                                                                Length 413;
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Search completed: April 11, 2006, 03:46:10 Job time : 9.5 secs

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Maximum DB
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       length: 0
length: 2000000000
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Match
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1983.546 Million cell updates/sec
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Query Match Best Local S Matches

Local Similarity

Conservative 0;

67.9%; Score 182; DB 1; 100.0%; Pred. No. 1.6e-169;

Length 267; Indels

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KPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYRLKFR

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KGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRV

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A;Accession: A31194 A;Molecule type: mRNA A;Residues: 1-267 <zha> A;Cross-references: UNIPROT:P12034; UNIPARC C;Genetics: A;Gene: GDB:FGF5 A;Cross-references: GDB:119907; OMIM:165190 A;Map position: 4q21-4q21 C;Superfamily: fibroblast growth factor C;Superfamily: fibroblast growth factor</zha>	TYMUPS fibroblast growth factor 5 - human fibroblast growth factor 5 - human N;Alternate names: transforming protein FGF5 C;Species: Homo sapiens (man) C;Date: 31-Dec-1989 #sequence_revision 31-De C;Accession: A31194 R;Zhan, X.; Bates, B.; Hu, X.; Goldfarb, M. Mol. Cell. Biol. 8, 3487-3495, 1988 A;Title: The human FGF-5 oncogene encodes a A;Reference number: A31194; MUID:89096942; P		44440 337 44440 5443
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R;Hattori, Y.; Yamasaki, M.; Itoh, N.
Biochim. Biophys. Acta 1306, 31-33, 1996
A;Title: The rat FGF-5 mRNA variant generated by alternative A;Reference number: S68144; MUID:96201703; PMID:8611621
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C;Date: 06-Dec-1996 #sequence_revision 13-Mar-1997 #
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Biochim. Biophys. Acta 1306, 31-33, 1996
Biochim. Biophys. Acta 1306, 31-33, 1996
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Dev. Biol. 138, 454-463, 1990
A;Title: Isolation of cDNAs encoding four mouse FGF family
A;Reference number: A37360; MUID:90201563; PMID:2318343
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A;Residues: 1-264 <HAU>
A;Cross-references: UNIPROT:P15656; UNIPARC:UPI0000003F7B; GB:M37821; GB:M37822;
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hypothetical protein F58D12.1 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #te
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C;Superfamily: Saccharomyces probable membrane protein YLR294C
C;Keywords: transmembrane protein
F;77-93/Domain: transmembrane #status predicted <TMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Pauley, A. submitted to the EMBL Data Library, November 1994 a. Pagarintion: The sequence of S. cerevisiae cosmid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    probable membrane protein YLR294c - yeast (Saccharomyces W;Alternate names: hypothetical protein L8003:19-a C;Species: Saccharomyces cerevisiae C;Date: 20-dul-1996 #sequence_revision 23-Aug-1996 #text_C;Accession: S69307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
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C;Keywords: alternative
                                                                                                                                                             A;Status: preliminary; translated A;Molecule type: DNA A;Residues: 1-143 <WIL>
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                                                                                                                 A; Experimental source: C; Genetics:
                                                                                                                                A;Cross-references: UNIPROT:002276; A;Experimental source: clone F58D12
                                                                                                                                                                                                               A; Reference number: A; Accession: T22906
                                                                                                                                                                                                                              submitted to the EMBL Data A; Reference number: Z19635
                                                                                                                                                                                                                                                              R; Percy, C.
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A; Residues: 1-109 < PAU>
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                                                                                                A;Gene: CESP:F58D12.1
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3.4%; Score 9; DB
100.0%; Pred. No. 0.
Live 0; Mismatches
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                                                                                                                                                                                                from GB/EMBL/DDBC
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                                                                                                                                                                                                                                               October
                                                                                                                                               UNIPARC: UPI00000753E8; EMBL: Z81092; PIDN: CAB03144.1
                                                                                                                                                                                                                                                                                           15-Oct-1999 #text_change
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                DB 2;
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. 2.6e-30;
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C;Accession: S04741; A37360
R;Brookes, S.; Smith, R.; Thurlow, J.; Dickson, C.; Peters, Nucleic Acids Res. 17, 4037-4045, 1989
A;Title: The mouse homologue of hst/k-FGF: sequence, genome A;Reference number: S04741; MUID:89296455; PMID:2740210
                                                                                           N;Alternate names: transforming protein hstfl; transforming protein k-FGF; transforming C;Species: Mus musculus (house mouse)
C;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 09-Jul-2004
C;Accession: S04741; A37360
                                                                                                                                                                                          RESULT
TVMSHS
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                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein YOR382w - yeast (Saccharomyces cerevisiae) N; Alternate names: hypothetical protein 06760
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submitted to the EMBL Data Library, July 1997
A;Description: The sequence of A. thaliana TM018A10.
A;Reference number: Z14348
A;Accession: T01566
A;Status: translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein A_TM018A10.23 - Arabidopsis thaliana (;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 19-Feb-1999 #sequence_revision 19-Feb-1999 #text_change 09-Jul-2004 C;Accession: T01566
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A:Experimental source: strain S288C
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A; Residues: 1-153 < DEL>
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Matches 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gene: SGD:FIT2; MIPS:YOR382w
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100.0%; Pred. No. 2.6;
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Pred. No.
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C; Keywords: growth
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                                   VGIGFHLQ 102
VGIGFHLO 97
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A;Access.u....A;Anolecule type: mRNA
A;Residues: 1-206 <BOV>
A;Cross-references: UNIPARC:UPI0000040662;
A;Cross-references: UNIPARC:UPI0000040662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N;Alternate names: heparin secretory transforming protein 1; Kaposi sarcoma oncogene; to (Species: Homo sapiens (man) C;Date: 31-Mar-1989 #sequence_revision 31-Mar-1989 #text_change 09-Jul-2004 C;Accession: A28417; A29876; A29649 R;Yoshida, T.; Miyagawa, K.; Odagiri, H.; Sakamoto, H.; Little, P.F.R.; Terada, M.; Sug Proc. Natl. Acad. Sci. U.S.A. 84, 7305-7309, 1987 A;Title: Genomic sequence of hst, a transforming gene encoding a protein homologous to A;Reference number: A28417; MUID:88041096; PMID:295959
                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: mRNA
A;Residues: 1-206 <TAI)
A;Residues: 1-206 <TAI)
A;Cross-references: UNIPARC:UPI000040662; GB:J02986; GB:M16338; NID:g184430; PIDN:AAB59
A;Cell Bovi, P.; Curatola, A.M.; Kern, F.G.; Greco, A.; Ittmann, M.; Basilico, C.
Cell 50, 729-737, 1987
Cell 50, 729-737, 1987
A;Title: An oncogene isolated by transfection of Kaposi's sarcoma DNA encodes a growth fareference number: A29649; MUID:87301716; PMID:2957062
A;Accession: A29649; MUID:87301716; PMID:2957062
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A; Residues: 1-206 < YOS>
A; Residues: 1-206 < YOS>
A; Cross-references: UNIPROT: P08620; UNIPARC: UPI0000040662;
A; Cross-references: Miyagawa, K.; Sakamoto, H.; Terac P: Torac Marian M.; Yoshida, T.; Miyagawa, K.; Sakamoto, H.; Terac P: Torac Matl. Acad. Sci. U.S.A. 84, 2980-2984, 1987
Proc. Natl. Acad. Sci. U.S.A. 84, 2980-2984, 1987
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Dev. Biol. 138, 454-463, 1990
A;Title: Isolation of cDNAs encoding four mouse FGF family
A;Reference number: A37360, MUID:90201563, PMID:2318343
A;Accession: A37360
                                                                                                     C;Superfamily: fibroblast (
C;Keywords: growth factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Title: cDNA sequence of human transforming gene hat and identification of the coding A;Reference number: A29876; MUID:87204251; PMID:2953031
A;Accession: A29876
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A;Residues: 1-166,'S',168-202 <HEB>
A;Cross-references: UNIPARC:UPI000000415D;
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                                                                                                                                                             A; Introns: 114/1; 148/3
                                                                                                                                                                                         A; Map position: 11q13.3-11q13.3
                                                                                                                                                                                                                     A;Cross-references: GDB:120066; OMIM:164980
                                                                                                                                                                                                                                               A; Gene: GDB: FGF4; HSTF1
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                                                                                                                                 Superfamily: fibroblast growth factor
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                              Similarity
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  Conservative
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                              100.0%;
                                                                                                          Kaposi
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  0,
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Mismatches
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                                                                                                                                                                                                                                                                                                 GB:M17446; NID:g186785; PIDN:AAAS9473.1; | Kaposi's sarcoma. It is homologous to the
                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GB:M30642; NID:g193290;
                                                  Length 206;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1662; DDBJ:J02986; NID:g184430; PIE
Terada, M.; Sugimura, T.
     Indels
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  Gaps
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A;Map
                                                                              A;Residues: 1-208 <IID>
A;Cross references: UNIPARC:UPI00000411BF; EMBL:X63454
A;Note: it is uncertain whether Met-1 or Met-11 is the
A;Marics, I.; Adelaide, J.; Raybaud, F.; Mattei, M.G.;
Oncogene 4, 335-340, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPROT:P10767; UNIPARC:UPI00000411BF; EMBL:X57075
A;Note: it is uncertain whether Met-1, Met-11 or Met-34 is the initiator
R;Iida, S.; Yoshida, T.; Naito, K.; Sakamoto, H.; Katoh, O.; Hirohashi, S.;
Oncogene 7, 303-309, 1992
A;Title: Human hst-2 (FGF-6) oncogene: cDNA cloning and characterization.
A;Reference number: S23739; MUID:92195660; PMID:1549352
A;Accession: S23739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
JC4268
                                                                                                                                                                                                                                A; Title: Characterization of the HST-related FGF.6 gene, A; Reference number: S04204; MUID:89201880; PMID:2649847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Coulier, F.; Batoz, M.; Marics, I.; de Lapeyriere, O.; Oncogene 6, 1437-1444, 1991
A;Title: Putative structure of the FGF6 gene product and A;Reference number: S20102; MUID:91360279; PMID:1886714
A;Accession: S20102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N,Alternate names: fibroblast growth factor-related protein FGF C;Species: Homo sapiens (man) C;Date: 18-Feb-1994 #sequence revision 12-Apr-1996 #text_change C;Accession: S20102; S23739; S04204; S36910
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A;Note: The authors translated the codon GGC for residue 114 as C;Comment: This protein is a member of fibroblast growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Yu, J.C.; DeSeabra, A.J.J.; Wang, L.M.; Fleming, T.P.; Chedid, M.; Miki, T.; Heidaran, Gene 162, 333-334, 1995
Gene 162, 333-334, 1995
A;Title: An unexpected transforming gene in calf-thymus carrier DNA: Bovine hst.
A;Reference number: JC4268; MUID:96032369; PMID:7557455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N;Alternate names: transforming protein hst
C;Species: Bos primigenius taurus (cattle)
C;Date: 10-Nov-1995 #sequence_revision 08-Feb-1996 #text_change 17-Mar-2000
C;Date: TG-1895 #sequence_revision 08-Feb-1996 #text_change 17-Mar-2000
                                                      A; Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-208 < COU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fibroblast growth factor 6 precursor - human N_iAlternate names: fibroblast growth factor-related protein FGF.6; transforming
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Introns: 113/3; 145/2
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                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;Superfamily: fibroblast growth factor;Reywords: thymus; transforming protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Status: not compared with conceptual translation
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Best Local
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                                 position:
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                            12p13-12p13
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                                                      GDB:119908;
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100.0%; Pred. No.
                                                      OMIM: 134921
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                                                                                                                                                                                                                                                                                                                                 initiator
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                                                                                                                             NID:g31354;
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                                                                                                                                                                                                                                                                                                         F.; Planche,
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A;Cross-references: UNIPROT:O82315; UNIPARC:UP10000179899; GB:AE002093; NID:g3643601; PI
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A;Title: Isolation and sequence of the murine Fgf6 cDNA. A;Reference number: I49664; MUID:93120244; PMID:1477139 A;Accession: I49665
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: UNIPROT:P21658; UNIPARC:UPI0000020A67; EMBL:X51552 A;Note: it is uncertain whether Met-1 or Met-11 is the initiator R;Ollendorff, V., Rosnet, O.; Marics, I.; Birnbaum, D.; deLapeyriere, OBiochimie 74, 1035-1038, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Accession: S14192; 149665; \overline{1}49664, R;de Lapeyriere, O:; Rosnet, O:; Benharroch, D:; Raybaud, F:; Marchetto, S:; Planche, Oncogene 5, 823-831, 1990 A;Title: Structure, chromosome mapping and expression of the murine Fgf-6 gene. A;Reference number: S14192; MUID:90295275; PMID:2193291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fibroblast growth factor 6 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 21-Nov-1993 #sequence revision 10-Nov-1995 #text_change 09-Jul-2004
C;Accession: S14192; I49665; I49664
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A;Residues: 19-208 <RES>
A;Cross-references: UNIPARC:UPI000016CD51; GB:M92416; NID:g193288; PIDN:AAA62261.1; PID:
                                                                                                                                                                                                                                    C; Superfamily:
                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-18 < RE2>
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A; Residues: 1-208 < LAP>
B84653
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Matches 8
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Best Local
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                                                                          92
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                                                                                                                                                                                             Length 208;
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A;Title: Sequence and analysis of chromosome A;Reference number: A84420; MUID:20083487; PN A;Accession: B84653 A;Status: preliminary
                                                                                                                                                                                                                                                                             R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.B.; Umayam, L.; Tallon, euss, D.; Nierman, W.C.; White, O.; Bisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter,
                                                                                                                                                                                                                                                                                                                                                                                                             TINY-like AP2 domain transcription factor [imported] - Arabidopsis thaliana (species: Arabidopsis thaliana (mouse-ear cress) C:Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 C:Accession: B84653
A; Molecule type: DNA
A; Residues: 1-225 <STO>
                                                                                                                                                                                                                                                   Nature 402, 761-768,
                                                                                                                                                                                                                                                   1999
                                                                                                                                                                  ne 2 of the plant Arabidopsis thaliana. PMID:10617197
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Venter, , c.y.,

V.

Model .

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nuclear protein SR-25 - mouse
C;Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Date: 09-Jun-2000 #sequence_revision 09-Jun-2000 #text_change 09-Jul-2004
C;Accession: JC7219
R;Sasahara, K.; Yamaoka, T.; Moritani, M.; Tanaka, M.; Iwahana, H.; Yoshimoto, K.; Miyag Biochem. Blophys. Res. Commun. 269, 444-450, 2000
A;Title: Molecular cloning and expression analysis of a putative nuclear protein, SR-25.
A;Reference number: JC7219; MUID:20175222; PMID:10708573
A;Accession: JC7219; MUID:20175222; PMID:10708573
A;Accession: JC7219 *KNA
A;Residues: 1-229 *SAS>
A;Cross-references: UNIPROT:09JM93; UNIPARC:UPI00000231C4; DDBJ:AB035383; NID:g7619895;
A;Cross-references: UNIPROT:09JM93; UNIPARC:UPI00000231C4; DDBJ:AB035383; NID:g7619895;
A;Experimental source: MING cell line
C;Comment: This protein is a highly hydrophilic nuclear protein with a serine-arginine r
A splicing factors.
C;Keywords: nucleus; RNA processing
Search completed: April 11, 2006, 03:38:26 Job time : 13 secs
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2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

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PLSAPRKNTNSVKYRLKFRFG 	GKAKRGCSPRV GKAKRGCSPRV	VFSNKFLAMSK VFSNKFLAMSK	QSSFQWSPSGR	LSAWAHGEKRI SAWAHGEKRI	.0%; Sc .0%; Pr	2846 7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	ALIC	5 US-10-9 4 US-10-9 4 US-10-10-1 4 US-10-1 5 US-09-9 3 US-09-9 3 US-09-8 3 US-09-8 3 US-09-8 4 US-10-4 4 US-10-4 5 US-10-4 6 US-11-0-4
\PG 268 FG 268	TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNP 	LEI FAVSQGI VGI RGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENS 	FQWSDSGRRTGSLYCRVGIGFHLQIYDDGKVNGSHEANWLS	fililefshlilsawahgekrlapkgqpgdaatdrnp 	268; DB 3 No. 4.3e-2 matches	63A rowth Factor-19 /284,663A	ALIGNMENTS	-10-935-226-7 -10-932-284-7 -10-016-447-13 -10-111-965-9 -10-690-19-14 -09-901-938-27 -09-802-154-39 -09-802-154-39 -10-767-701-41558 -10-767-701-415-3971 -09-572-4048-3799 -10-437-63-18708 -10-437-63-18708 -10-437-63-18708 -10-437-63-18708 -10-437-63-18708 -10-437-63-18708 -10-437-63-18708 -10-437-63-18708 -10-437-63-18708
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	SPTVTVPEKKO SPTVTVPEKKO	PQENSYNTYASAIHR PQENSYNTYASAIHR	(VNGSHEANML (VNGSHEANML	SSRQSSSSAMSSSSAS	68; 0; Gap			quence quence quence quence quence quence quence quence quence quence quence quence quence quence
	PP 240	HR 180 - HR 180	SV 120 SV 120	AS 60	в О			7, Appli 7, Appli 13, Appli 9, Appli 14, Appl 27, Appl 39, Appl 39, Appl 39, Appl 41558, A 59971, A 59971, Ap 3798, Ap 3798, Ap 3798, Ap 3799, Ap

RESULT 2 US-09-750-963-11 ; Sequence 11, Application US/09750963

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7, Application US/09902773A Patent No. US20020034787A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 268; Conservative
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CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/173,578
PRIOR FILING DATE: 1999-12-29
NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. US20020031805A1
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TITLE OF INVENTION: NOVEL FGF HOMOLOG ZFGF10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
CORRESPONDENCE STERNE, KESSLER, GOSTREET: 1100 NEW YORK AVENUE,
             APPLICATION NUMBER: US/08/803,926
PILING DATE: 21-FEB-1997
ATTORNEY/ACENT INFORMATION:
NAME: STEFFE, ERIC K.
                                                                                       APPLICATION NUMBER: US/09/902,773A
FILING DATE: 12-U1-2001
CLASSIFICATION: -UNKnown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                    GOCAYNE, JEANNINE D.
TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR-10
NUMBER OF SEQUENCES: 14
                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                     COUNTRY: US
ZIP: 20005-3934
                                                                                                                                                                                                                                                                                                                           STATE: DC
                                                                                                                                                                                                                                                                                                                                            CITY: WASHINGTON
REGISTRATION NUMBER: 36,688
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Pred. No. 4.3e-240;
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TITLE OF INVENTION: FACTOR-1 (FHF-1) AND METHODS OF USE
FILE REFERENCE: 07265/047003
CURRENT APPLICATION NUMBER: US/09/251,263
CURRENT FILING DATE: 1999-02-16
EARLIER APPLICATION NUMBER: 08/867,471
EARLIER APPLICATION NUMBER: 08/867,471
EARLIER FILING DATE: 1997-06-02
EARLIER APPLICATION NUMBER: 08/439,725
EARLIER FILING DATE: 1995-05-12
VOUNBER: 07 SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 268
TYPE: PRT
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; Sequence 12, Appl
; Patent No. US2002
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                                                                                                                                                    Query Match
                                                                                                                   Matches
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APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jennifer P.
                                                                                                                                                                                                                 ORGANISM: Homo sapiens
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SEQUENCE CHARACTERISTICS:
                                                                                                                                     Local Similarity
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TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
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SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
                                                                             MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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                                        MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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S20020052477A1
                                                                                                                   Conservative
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                                                                                                                                   100.0%; Score 268; DB 3; I
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371-2540
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RESULT 6
US-10-189-360-14
; Sequence 14, Application US/10189360
; Publication No. US20030143217A1
; GENERAL INFORMATION:
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US-10-081-347-33
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SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 268;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 268; DB 4; I Best Local Similarity 100.0%; Pred. No. 4.3e-240; Matches 268; 'Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
-10-081-347-33:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Hansen, Birgit
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Deisher, Theresa A. APPLICANT: Conklin, Darrell C. APPLICANT: Raymond, Fenella APPLICANT: Bukowski, Thomas R.
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PRIOR APPLICATION NUMBER: US/09/229,947
PRIOR FILING DATE: 1999-01-13
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CURRENT FILING DATE: 2002-02-21
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                                                                                                                                                                                                                                                                                                                                          SSPAASIGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
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Holderman, Susan D.
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US-10-192-988-8
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Sequence 8, Application US/10192988 Publication No. US20030166875A1 GENERAL INFORMATION:
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SEQUENCE DESCRIPTION: SEQ ID NO: 14: US-10-189-360-14
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Best Local Similarity 100.0%;
Matches 268; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC COMPACTIBLE
COPERATING SYSTEM: FC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/189,360
FILING DATE: 02-Jul-2002
CLASSIFICATION **CURROW**
PRIOR APPLICATION NUMBER: US/08/718,904
FILING DATE: 24-SEP-1996
APPLICATION NUMBER: US/08/718,904
FILING DATE: 24-SEP-1996
ATTORNEY, AGENT INFORWATION:
NAME: NO. US20030143217Altenburg Ph.D., Ca
REGISTRATION NUMBER: 39,317
REFERENCE/DOCKET NUMBER: 760100.415C1
TELECHOMIS: (206) 682-6031
TELECHON: TOOK CONT. 11.00
TELEFAX: (206) 682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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Sosnowski, Barbara A.
TITLE OF INVENTION: COMPOSITIONS CONTAINING NUCLEIC ACIDS AND LIGANDS
FOR THERAPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
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241
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                        SPIKSKIPLSAPRKNTNSVKYRLKFRFG 268
                                                                                                                                                                                                                                                                                SSPAASIGSQGSGLEQSSPQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
                                                                                                       TEXTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP 240
                                                                                                                                                                    LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                                                                                                                                          SSPAASIGSOGSGLEOSSFOWSPSGRRTGSLYCRVGIGFHLOIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                                                                                                             MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
SPIKSKIPLSAPRKNTNSVKYRLKFRFG
                                                                                 TEXTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP
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STRANDEDNESS: single
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STATE: Washington
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PRIOR APPLICATION NUMBER: US/09/634,318
PRIOR APPLICATION NUMBER: US/09/634,318
PRIOR FILING DATE: 2000-08-09
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FRATESEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
US-10-315-431-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: SMALIMOO, CHILD M.

APPLICANT: MACKE, Jennifer P.

TITLE OF INVENTION: PIBROBLAST GROWTH FACTOR HOMOLOGOUS FAC

FILE REFERENCE: JHU1230-2

CURRENT APPLICATION NUMBER: US/10/192,988

CURRENT FILING DATE: 2002-07-10

PRIOR APPLICATION NUMBER: US 09/261,007

PRIOR APPLICATION NUMBER: US 09/261,007

PRIOR APPLICATION NUMBER: US 08/438,439

PRIOR APPLICATION NUMBER: US 08/438,439

PRIOR FILING DATE: 1995-05-12

NUMBER OF SEQ ID NOS: 25

SOFTWARE: Patentin version 3.1

SEQ ID NO 8

LENGTH: 268
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US-10-315-431-33

; Sequence 33, Application US/10315431

; Publication No. US20030199443A1
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Best Local Similarity
Matches 268; Conser
 Query Match
Best Local Similarity
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APPLICANT: Deisher, Theresa A.
APPLICANT: Hughes, Steven D.
APPLICANT: Moore, Emma E.
APPLICANT: Wahl, Alan F.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20C4
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                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/315,431
CURRENT FILING DATE: 2002-12-09
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Pred. No. 4.3e-240;
Score 268; DB 4; Length 268; Pred. No. 4.3e-240;
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-347-177-11
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US-10-347-177-11
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SOFTWARE: FastSEQ for
SEQ ID NO 11
LENGTH: 268
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APPLICANT: Nathans, Jeremy
APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jennifer P.
APPLICANT: Macke, Jennifer GROWTH FACTOR HOLT TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR HOLT TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR HOLT TITLE OF INVENTION NUMBER: US/10/347,177
CURRENT APPLICATION NUMBER: US/10/347,177
CURRENT FILING DATE: 2003-01-16
PRIOR APPLICATION NUMBER: US/10/347,177
PRIOR APPLICATION NUMBER: US/10/347,177
PRIOR APPLICATION NUMBER: US/10/347,471
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US-10-372-653-11
; APPLICANT: Holderman, Susan D.
; APPLICANT: Hansen, Birgit
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: NOVEL FGF HOMOLOGS
; FILE REFERENCE: 96-20
; CURRENT APPLICATION NUMBER: US/10/037,922
; CURRENT FILING DATE: 2001-10-19
; PRIOR APPLICATION NUMBER: 08/951,822
; PRIOR FILING DATE: 1997-10-16
                                                                                                                                                 APPLICANT: Deisher, Theresa A.
APPLICANT: Conklin, Darrell C.
APPLICANT: Raymond, Fenella
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Hansen, Birgit
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PRIOR APPLICATION NUMBER: 09/514,587
PRIOR FILING DATE: 2000-02-28
PRIOR APPLICATION NUMBER: 09/093,585
PRIOR APPLICATION NUMBER: 09/093,585
PRIOR FILING DATE: 1998-06-08
PRIOR PELICATION NUMBER: 09/464,590
PRIOR FILING DATE: 1995-06-05
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LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
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Best Local Similarity
Matches 268; Conserv
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CURRENT APPLICATION NUMBER: US/10/372,653

CURRENT FILING DATE: 2003-02-25

PRIOR APPLICATION NUMBER: 09/572,406

PRIOR PILING DATE: 2000-05-16

PRIOR APPLICATION NUMBER: 60/135,524
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TITLE OF INVENTION: Fibroblast Growth Factor 11
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; SOFTWARE: FASTSEQ for Wir
; SEQ ID NO 33
; LENGTH: 268
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-854-485-33
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APPLICANT: CORKIIN, DATREIL C.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20C7
CURRENT APPLICATION NUMBER: US/10/854,485
CURRENT FILING DATE: 2004-05-26
PRIOR APPLICATION NUMBER: 10/315,431
PRIOR APPLICATION NUMBER: 10/081,347
PRIOR APPLICATION NUMBER: 09/634,319
PRIOR APPLICATION NUMBER: 09/634,319
PRIOR FILING DATE: 2000-08-09
PRIOR APPLICATION NUMBER: 09/613,708
PRIOR PILING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 09/574,750
PRIOR FILING DATE: 2000-05-18
PRIOR APPLICATION NUMBER: 09/229,947
PRIOR APPLICATION NUMBER: 09/229,947
PRIOR APPLICATION NUMBER: 09/229,947
PRIOR APPLICATION NUMBER: 08/951,822
PRIOR APPLICATION NUMBER: 08/951,822
PRIOR PILING DATE: 1997-10-16
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US-10-854-485-33
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Publication No. US20050043234A1
GENERAL INFORMATION:
APPLICANT: Deisher, Theresa A.
APPLICANT: Conklin, Darrell C.
Query Match
Best Local Similarity
Matches 268; Conserv
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 33
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PRIOR FILING DATE: 1996-10-16
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ORGANISM: Homo sapiens
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100.0%; Score 268; DB 5; I ilarity 100.0%; Pred. No. 4.3e-240; Conservative 0; Mismatches 0;
                                                                                                                                                                                                       for Windows Version
                                          Length 268;
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MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS

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APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Hayrence, David A.
APPLICANT: Roy, Margaret Ann
TITLE OF INVENTION: Polypeptides Sharing Sequence Identity With A Fibroblast Growth
TITLE OF INVENTION: Polypeptide and Nucleic Acids Encoding The Same
FILE REFERENCE: P1219R1EC1
CURRENT APPLICATION NUMBER: US/10/413,537
CURRENT FILING DATE: 2003-04-11
PRIOR APPLICATION NUMBER: US 09/284,663
PRIOR APPLICATION NUMBER: US 09/158,342
PRIOR APPLICATION NUMBER: US 09/158,342
PRIOR FILING DATE: 1998-09-21
PRIOR APPLICATION NUMBER: CT/US98/25190
PRIOR FILING DATE: 1998-11-25
PRIOR APPLICATION NUMBER: GC/066,840
PRIOR FILING DATE: 1997-11-25
PRIOR APPLICATION NUMBER: GC/066,840
PRIOR FILING DATE: 1997-11-25
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US-10-413-537-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 10
LENGTH: 268
                                                                                                                                                                                                                                                                                                                                                               Matches 268;
                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Botstein, David APPLICANT: Goddard, Audrey APPLICANT: Gurney, Austin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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SPIKSKIPLSAPRKNTNSVKYRLKFRFG
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                                                                                TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP 240
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                                                                                                                                                        TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 SPIKSKIPLSAPRKNTNSVKYRLKFRFG
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RESULT 14
US-09-345-373-15
; Sequence 15, Application US/09345373
; Publication No. US20030077695A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: ITAM PC COMPATIBLE
COMPUTER: ITAM PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/345,373
FILING DATE:
CLASSIFICATION:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: U9/023,082
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: U9/023,082
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-UN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-PEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-PEB-1997
PRIOR APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997
                                                                                                                                                                                                                                    PILING DATE: 23-MAY-1997

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/910,875

PILING DATE: 13-AUG-1997

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055,561

PILING DATE: 13-AUG-1997

PILING DATE: 13-AUG-1997

ATTORNEY/AGENT INFORMATION:
NAME: STEFFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.03600

TELECOMMUNICATION INFORMATION:
                                                                                                                                TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
STRANDEDNESS: No. US20030077695A1 Relevant TOPOLOGY: No. US20030077695A1 Relevant MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C
STREET: 1100 NEW YORK AVE, NW, SUITE 600
                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COLEMAN, TIMOTHY A. GRUBER, JOACHIM R. DILLON, PATRICK J. GENTZ, REINER L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZHANG, JUN
NI, JIAN
MOORE, PAUL A.
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DUAN, D. ROXANNE
RAMPY, MARK A.
MENDRICK, DONNA
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RESULT 15
US-10-075-446-15
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Publication No. US200:
GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/075,446
FILING DATE: 15-Feb-2002
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NI, JIAN
MOORE, PAUL A.
COLEMAN, TIMOTHY A.
GRUBER, JOACHIM R.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: RUBEN, STEVEN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                223
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                                                                                            APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
APPLICATION NUMBER: US 08/910,875
FILING DATE: 13-AUG-1997
APPLICATION NUMBER: US 60/055,561
                                                           APPLICATION NUMBER: US 08/862,432 FILING DATE: 23-MAY-1997
                                                                                                                                                                       APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
APPLICATION NUMBER: US 08/461,195
FILING DATE: 05-JUN-1995
                                                                                                                                                                                                                                                  APPLICATION NUMBER: 09/023,082 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: WASHINGTON
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No. US20030129687A1
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DUAN, D. ROXANNE
RAMPY, MARK A.
MENDRICK, DONNA
ZHANG, JUN
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100.0%; Pred. No. 4.1e-201;
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Matches 226; Conserv
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TYPE: amino acid
STRANDEDNESS: NO. US20030129687A1 Relevant
TOPOLOGY: No. US20030129687A1 Relevant
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: STEFFFE, ERIC K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
223
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EQPELSFTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYRLKFRFG 268
                      EQPELSPTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYRLKFRFG 268
                                                                                    RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
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REGISTRATION NUMBER: 36,6
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                  Conservative
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Search completed: April 11, Job time : 61.5 secs 2006, 03:45:46

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Perfect score:
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   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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268
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1: uniprot_sprot:*
2: uniprot_trembl:*
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(c) 1993 - 2006 Biocceleration Ltd.
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08SQ73 CANFA

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06XK00 RABIT

05TLE2 BRARE

04RP06 TETMG

08WN07 CANFA

013543 YEAST

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076B3 DICDI
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Q9VJ56 DROME
Q8SZH3 DROME
Q8SZH3 DROME
Q86BR3 DROME
Q851P2 ORYSA
O02276 CARECL
Q9J173 MOUSE
Q85444 SORBI
Q5MFQ8 DICLA
Q7SOUP NEUCR
Q4QBT7 LEIMA
Q8BSD5 MOUSE
Q5VZH9 ORYSA
Q650Z7 ORYSA
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itted (JUI BOTIDE SEC UB-Umbilic INB-203790 ries C.J.W. Cate J.W.,	C. Natl. Acad. LEOTIDE SEQUEN LINE=89096942; A. Bates B. human FGF-5 roblast growth . Cell. Biol Cell. Siol Bounki mura T.; alternatively malates into a	CT-1989 (R EP-2001 (R EP-2005 (R	HUMAN 999999999999999999999999999999999999
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Bank/DDBJ data DI=10.1074/jbc E., Horrevoets E., Horrevoets muscle cells. ooth muscle ac ssed in neonat ssed in soforms=2; ayed;	8026(1990). vel protein r vel protein r y., Li A., y s abundant in gonist for FG	pdate) update) (FGF-5) (HBGF- a; Vertebrata; Primates; Cat	AA.
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Name=Short; Synonyms=FGF-5S; IsoId=P12034-2; Sequence=VSP_001518, VSP_001519; SIMILARITY: Belongs to the heparin-binding growth factors family.

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Matches 226
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GO; GO:0005615; C:extracellular space; TAS.
GO; GO:0008283; P:cell proliferation; TAS.
GO; GO:0007267; P:cell-cell signaling; TAS.
GO; GO:0007267; P:cell-cell signaling; TAS.
GO; GO:0008543; P:fibroblast growth factor receptor signaling. .
GO; GO:0007399; P:neurogenesis; TAS.
InterPro; IPR0022209; GF heparin_bd.
InterPro; IPR002348; ILI_HBGF.
Pfam; PF00167; FGF; 1.
                                                                                                                                                                                                                                               CONFLICT
CONFLICT
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PRINTS; PR00263; HBGFFGF.

PRINTS; PR00262; IL1HBGF.

ProDom; PD000831; IL1 HBGF; 1.

SMART; SM00442; FGF; 1.
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EMBL; M23536; AAB66699.1; -; Genomic_DNA.
EMBL; M23534; AAB66699.1; JOINED; Genomic_DNA.
EMBL; M23535; AAB66699.1; JOINED; Genomic_DNA.
EMBL; M23534; AAB60699.1; ALT_SEQ; Genomic_DNA.
EMBL; M23534; AAB60698.1; ALT_SEQ; Genomic_DNA.
EMBL; M23534; BAAB37381.1; -; mRNA.
EMBL; AP171928; AAF89742.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
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Alternative splicing; Glycoprotein; Growth factor; Mitogen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A31194; TVHUF5.
223
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                                                             RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRPKQS
                                                                                                                                                                      GSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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Pred. No. 1.2e-212;
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PSGR -> LGA (in Ref. 2).
08F4268B26781E9D CRC64;
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Missing (in isoform Short).
/FTId=VSP_001519.
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RESULT 2 Q8NF90_HUMAN

Conservative

Indels

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Gaps

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RC TISSUELLING
RX MEDLINE=22388257, PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gabbs R.A.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
"Generation and initial analysis of more than 15,000 full-length human
"Generation and initial analysis of more than 15,000 full-length human
"Generation and initial analysis of more than 15,000 full-length human
     Query Match
Best Local Similarity
Matches 195; Conser
                                                                                                                                   GO; GO:0008083; F:growth factor activity; II
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR0020348; IL1_HBGF.
Pfam; PF00167; FGF; 1.
PFANT'S; PR00263; HBGFFGF.
PRINT'S; PR00263; HBGFFGF.
PRINT'S; PR00263; IL1HBGF.
PRODOm; PD000831; IL1 HBGF; 1.
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01-OCT-2002 (TrEMBLrel. 22,
10-MAY-2005 (TrEMBLrel. 30,
Fibroblast growth factor 5,
                                                                                                                                                                                                                                                                                   Director MGC Project;

Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.

EMBL; AF535149; AAN04097.1; -; mRNA.

EMBL; BC074858; AAH74858.1; -; mRNA.

EMBL; BC074859; AAH74859.1; -; mRNA.

HSSP; P08620; 11JT.
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MEDLINE=21347229; PubMed=11454700;
MEDLINE=21347229; PubMed=D.M., Ohnmacht
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
                                                                               PROSITE; PS00247; HBGF_FGF; UNKNOWN_1.
Growth factor.
SEQUENCE 268 AA; 29551 MW; 28B7268
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and mouse cDNA sequences."
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72.8%; 5-
100.0%; Pr
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       ; Score 195; DB
%; Pred. No. 3e-
0; Mismatches
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RESULT 3

QRNBG6 HUMAN
ID QRNBG6 HUMAN P
AC HOMO.

QR HOMO SAPIENS SEQ
AX HOMO SAPIENS SEQ
AX HOMO J. TAXID=960
AX HAMANATA M., N
AM ACHIMATA Y., TAXID
AX AMANATA Y., YAMA
AX AMANATA Y., YAMAA
AX AMANATA Y., YAMAA
AX AMANATA Y., YAMAA
AX AMANATA Y., YAMAA
AX AMANATA
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                                                                                                                                                                                                                                                                                                                                                           RX PubMedia107039; DOI:10.1038/ng1285;
RX Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,
RA Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H.,
RA Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S.,
RA Yamamoto J.-I., Saito K., Kawai Y., Isono Y., Nakamura Y.,
RA Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M.,
RA Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H.,
RA Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H.,
RA Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H.,
RA Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E.,
RA Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K.,
RA Fujimori K., Tarai H., Kimata M., Watanabe S., Yosida M., Hotuta T.,
RA Kusano J., Kanehori K., Takahashi-Pujii A., Hara H., Tanase T.-O.,
RA Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Actsuka S.,
RA Yoshikawa Y., Matsunawa H., Ichihara T., Shiobata N., Sano S.,
RA Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O.,
RA Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebbe H.,
RA Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y.,
RA Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y.,
RA Yamazaki M., Watanabe T., Sugiyama A., Takemoto M., Cawakami B.,
RA Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y.,
RA Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
RA Matsumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R.,
RA Mizushima Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K.,
RA Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.;
RT CDNag. ",

CDN
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                                                                                                                         EMBL; AK090557; BAC03477.1; -; m
HSSP; Q02195; 1QQK.
GO; GO:0008083; F:growth factor
InterPro; IPR002348; IL11HBGP.
Pfam; PF00167; FGF; 1.
                                PRINTS; PR00262; IL1HBGF.
ProDom; PD000831; IL1 HBGF; 1.
SMART; SM00442; FGF; 1.
                                                                                                                                                                                                                                                                         Nat. Genet. 36:40-45(2004).
EMBL; AK090557; BAC03477.1; -; mRNA.
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PS00247; HBGF_FGF; UNKNOWN_1.
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RESULT 4
FGF5_MOUSE
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Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
A Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
A Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
A Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T
Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
A Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S
Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S
Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
A Gasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
Gastimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
A Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
A Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
A Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
A Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
A Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
A Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
A Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
A Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
A Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
A Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
A Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=91045929; PubMed=1700424;
Haub O., Drucker B., Goldfarb M.;
"Expression of the murine fibroblast growth factor
central nervous system.";
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"Isolation of cDNAs encoding four mouse
characterization of their expression pat
Dev. Biol. 138:454-463(1990).
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognal
Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-RPR-1990 (Rel. 14, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Fibroblast growth factor 5 precursor (FGF-5) (HBGF-5)
Name=Fgf5; Synonyms=Fgf-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-APR-1990 (Rel.
01-APR-1990 (Rel.
13-SEP-2005 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                STRAIN=C57BL/6J; TISSUE=Skin; MBDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
                                                                                                                                                                                                                                                                                                                                                                                                                                "An alternatively spliced fibroblast growth abundant in brain and translates into a part FGF-5 neurotrophic activity.", J. Biol. Chem. 273:29262-29271(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=99003286; PubMed=9786939; DOI=10.1074/jbc.273.44.29262; Ozawa K., Suzuki S., Asada M., Tomooka Y., Li A.J., Yoneda A., Komi A., Imamura T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P15656; O88825;
01-APR-1990 (Re
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                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] (ISOFORM LONG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEOTIDE SEQUENCE (ISOFORM SHORT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=C57BL/6;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE (ISOFORM LONG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=90201563; PubMed=2318343;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sci. U.S.A. 87:8022-8026(1990)
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; Pred. No.
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Gojobori Т.,
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RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L.H., Schaefer C.F., Bhat N.K.,
RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altechul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Glbbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human rand mouse collaboration and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                 EMBL; M30643; AAA96698.1; -; mRNA.

EMBL; M37823; AAB02660.1; -; Genomic_DNA.

EMBL; M37821; AAB02660.1; JOINED; Genomic_DNA.

EMBL; M37822; AAB02660.1; JOINED; Genomic_DNA.

EMBL; M37821; AAB02659.1; ALT_SEQ; Genomic_DNA.

EMBL; M37821; AAB02659.1; -; mRNA.

EMBL; A8016516; BAA33737.1; -; mRNA.

EMBL; AK028694; BAC36179.1; -; mRNA.

EMBL; AK028894; BAC26179.1; -; mRNA.

EMBL; BC071227; AAH71227.1; -; mRNA.

EMBL; BC071227; AAH71227.1; -; mRNA.

PIR; AA6207; A36207.
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PRINTS; PR00263; HBGFFGF.
PRINTS; PR00262; IL1HBGF.
ProDom; PD000831; IL1 HBGF; 1.
PROSITE; PS00247; HBGF_FGF; 1.
                                                                                                    Ensembl; ENSMUSG00000029337; Mus musculus.
MGI; MGI:95519; Pgf5.
GO; GO:0005615; C:extracellular space; TAS.
GO; GO:0010001; P:glial cell differentiation; IMP.
InterPro; IPR002209; GF heparin bd.
InterPro; IPR002209; GF heparin bd.
InterPro; IPR002348; III_HBGF.
Pfam; PF00167; FGF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s Swiss-Prot entry is copyright. It is produced through a ween the Swiss Institute of Bioinformatics and the EMBL European Bioinformatics Institute. There are no restric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=Short; Synonyms=FGF-5S;
IsoId=P15656-2; Sequence=VSP 001520, VSP 001521;
SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mouse cDNA sequences.";
c. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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RESULT
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                                                                                      EMBL; D64085; BAA10966.1; -; mt
EMBL; D64086; BAA10967.1; -; mt
PIR; S68144; S68144.
PIR; S68145; S68145.
HSSP; P08620; 11JT.
Ensembl; EMSRNOG00000022631; R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Fibroblast growth factor 5 precursor (FGF-5)
Name=Fgf5; Synonyms=Fgf-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus norvegicus (Rat).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;

Muroidea; Muridae; Murinae; Rattus.

NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                Hattori Y., Yamasaki M., Itoh N.,
"The rat FGF-5 mRNA variant generated by
a novel truncated form of FGF-5.",
Biochim. Blophys. Acta 1306:31-33(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proto-oncogene;
SIGNAL 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=Wista
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P48807; Q63402;
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                                                                                                                                                                                                                  the
                                                                                                                                                                                                                                                            Name=Short; Synonyms=FGF-5S;
IsoId=P48807-2; Sequence=VSP 001522, VSP 001523;
-!- SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE (ISOFORMS LONG AND SHORT)
                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=96201703; PubMed=8611621;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
Figf5.

G0:00199; Fgf5.

G0:0008083; F:growth factor activity; IDA.
G0:0008163; F:nerve growth factor receptor
; G0:0008283; P:cell proliferation; IDA.
terPro; IPR002209; GF_heparin_bd.
terPro; IPR002348; III_HBGF.
                                                                                                                                                                                                 s Swiss-Prot entry is copyright. It is produced through a ween the Swiss Institute of Bioinformatics and the EMBL European Bioinformatics Institute. There are no restrict as long as its content is in no way modified and this stan
                                                                                                                                                                                                                                                                                                                                      Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                            IsoId=P48807-1; Sequence=Displayed;
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N-linked (GlcNAc. . .) ()
ILEI -> QIYG (in isoform
                                                                                           Rattus norvegicus
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Missing (In isoform Short).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /FTId=VSP_001521.
F6A9C8153EE923D1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fibroblast growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FTId=VSP_001520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     DOI=10.1016/0167-4781(19)60001-1;
                                                                                                                                                                                                    way modified and this statement
                                                  receptor binding; TAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Le . 2.6e-79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210
                                                                                                                                                                                                                                                                                                                                                                                          alternative splicing encodes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HBGF-5)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Potential).
m Short).
                                                                                                                                                                                                                   restrictions
                                                                                                                                                                                                                                          a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,</u>
                                                                                                                                                                                                                              outstation
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                                                                                                                                                                                                     18
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RESULT 7
QBSQ73 CANPA
ID QBSQ73_CANPA PRELIMINARY;
AC QBSQ73;
AC QBSQ73;
DT 01-JUN-2002 (TremBirel. 2:
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                                                                                                                               밁
                                                                                                                                                                                                NUCLEOTIDE SEQUENCE.

NUCLEOTIDE SEQUENCE.

Nakakuki T., Ueba T.;

A Nakakuki T., Ueba T.;

Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.

R GC: GO:0008083; F:growth factor activity; IEA.

DR InterPro; IFR002348; ILL_HBGF.

DR Pfam; PF00167; FGF; 1.

DR ProDom; PD000831; ILL HBGF; 1.

ProDom; PD000831; ILL HBGF; 1.

PRODOM; PD000831; ILL HBGF; 1.
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Best Local S
Matches 90
                                                                                                                                                                             Matches
                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                            ULT 6
.549 HUMAN
QGA549 HUMAN PRELIMINARY;
QGA549;
QGA549;
25-OCT-2004 (TrEMBLrel. 28, L.
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CARBOHYD
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00263; HBGFFGF.
PRINTS; PR00262; ILLHBGF.
PRODOM; PD000831; IL1 HBGF; 1.
SMART; SM00442; FGF; 1.
PROSITE; PS00247; HBGF FGF; 1.
Alternative eplicing; Glycoprotein; Growth factor; Mitogen; Proto-oncogene; Signal.
Proto-oncogene; Signal.
Potential.
                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119
                                                                                  103
                                                                                                       103
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                                                                                                                               43
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                                                                                                                                                                                          Similarity
                                                                                                                                            GSSSRQSSSSAMSSSSAASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                 IYPDGKVNGSHEANMLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TEKTGREWYVALNKRGKAKRGCSPRVKPQH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                               GSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TEKTGREWYVALNKRGKAKRGCSPRVKPQH 208
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                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA;
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59
108
121
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                                                                                                                                                                                                                                                                                                                                                                   Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini; Homin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29264 MW;
                                                                                                                                                                                        28.7%; Score 77;
100.0%; Pred. No.
 21,
                                                                                                       119
                                                                                                                                                                                                                                                                                                                                                                                                         , Last sequence update)
, Last annotation update)
isoform s'.
                                                                                  119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 90; DB 1; Len; Pred. No. 2.6e-79;
                                                                                                                                                                             0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-linked (GlcNAc. . .) (Pote ILEI -> QIYR (in isoform She /FTId=VSP 001522.
Missing (In isoform Short).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fibroblast growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /FTId=VSP_001523.
95B0A0CA7C0A200C CRC64;
                                                                                                                                                                              Mismatches
                        153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    129
                                                                                                                                                                           7.5e-67;
hes 0;
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                        8
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                                                                                                                                                                                                   Length 129;
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                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                                                                      Hominidae;
                                                                                                                                                                             Gaps
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                                                                                                                                                      102
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RESULT 8
Q6XKO1_RABIT
ID O6XKO1;
AC Q6XKO1;
AC Q6XKO1;
AC Q6XKO1;
DT 05-UUL-2004 (TrEMBLrel. 27, La
DT 07-UUL-2004 (TREMBLREL. 2003) to the EM
DR EMBL, AY230008; AAP55849.1; -;
PT NON_TER 1
PT NON_TER 1
PT NON_TER 99 99
SQ SEQUENCE 99 AA; 10074 MW;
문
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                                                                                                        Query Match
Best Local S
Matches 30
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Best Local Similarity 100.0%;
Matches 60; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Growth f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GO; GO:0008083; F:growth factor activity; IEA.
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002248; ILI_HBGF.
Pfam; PP00167; FGF; 1.
PRINTS; PR00263; HBGFPGF.
PRINTS; PR00263; HBGFPGF.
PRINTS; PR00263; ILIHBGF.
PRODOM; PD008831; ILI HBGF; 1.
SMART; SM00442; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FGF-5 (Fragment).
Canis familiaris (Dog).
Cukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Laurasiatheria; Carnivora; Fissipedia; Canida
                                                                                                                                                                                                                                                 EMBL; AY230008; AAP55849.1; -; mRNA
NON_TER 1 1
NON_TER 99 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniat;
Mammalia; Eutheria; Euarchontoglires;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AY074893; AAL82819.1;
EMBL; AY074892; AAL82819.1;
HSSP; Q02195; 1QQK.
SMR; Q8SQ73; 163-223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases EMBL; AY074893; AAL82819.1; -; Genomic_DNA. EMBL; AY074892; AAL82819.1; JOINED; Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-2002 (TrEMBLrel. 01-MAR-2004 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oryctolagus cuniculus (Rabbit).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQŪENCE 153 AA; 17420 MW; ABF13D0921376295 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00247; HBGF_FGF; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ensembl; ENSCAFG00000008886; Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cartright
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63
70
                                                                                                                                     Similarity
                                                    PAASLGSQGSGLEQSSFQWSPSGRRTGSLY
PAASLGSQGSGL
                                                                                                        11.2%; So illarity 100.0%; F Conservative 0;
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                                                                                                                                                                                                                       10074 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chordata;
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26,
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%; Pred. No. 4.1
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation updat
(Fragment).
                                                                                                                                                                                                                                                                                                                                EMBL/GenBank/DDBJ
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Last annotation updat
                                                                                                                                   Score 30;
Pred. No.
                                                                                                                                                                                                                       DC2F2385BBFD427B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Buteleostomi; oglires; Glires; Lagomorpha; Leporid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                           Mismatches
                                                                                                                                   DB 2; Le
. 7.1e-21;
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                                                    92
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99
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                                                                                                                                                                Length 99;
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                                                                                                           Gaps
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Q6XKOO_RABIT
ID Q6XKOO; RABIT PRELIMINARY;
AC Q6XKOO;
AC Q6KKOO;
DT Q5-JUL-2004 (TrEMBLrel. 27,
DE PIDODLAST GROWTH Factor 5
GN Name=FGF5;
OS Oryctolagus cuniculus (Rabb:
CC Gryctolagus (Pag-2004)
CC Gryctolagus (PEG-2003) to the
CTRAIN=Fex;
RA Mulsant P., de Rochambeau H
RL Submitted (PEB-2003) to the
EMBL; AY330009; AAP55850.1;
DR GO; GO:0008083; F:growth fas
DR Ffam; pF00167; FGF; 1.
DR P7DODM; PD000831; IL1_HBGF;
PT NON_TER 1
PT NON_TER 79 79
SQ SEQUENCE 79 AA; 9056 MW;
                                                                                                                                                                           ALD DESCRIPTION OF THE PROPERTY OF THE PROPERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
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Best Local S
Matches 27
Query Match
Best Local S
Matches 21
                                                                                                                                                              EMBL; AB19469; BAD69616.1; -; mRNA.

ZFIN; ZDB-GENE-050201-6; fgf5.
GO:0008083; F:growth factor activity; IE:
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; IL1_HBGF.
Pfam; PP00167; FGF; 1.
PFRINTS; PR00263; HBGFPGF.
PRINTS; PR00263; HBGFPGF.
PRINTS; PR00263; IL1HBGF.
PRODOM; PD000831; IL1_HBGF; 1.
SMART; SM00442; FGF; 1.
SMART; SM00442; FGF; 1.
SMART; SM00442; FGF; 1.
GROWTH factor.
SEQUENCE 225 AA; 25933 MW; 329EAEDBE0713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q5TLE2_BRARE | Q5TLE2;
Q5TLE2;
01-FEB-2005 ('01-FEB-2005 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata;
Mammalia; Eutheria; Euarchontoglires; Gl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mulsant P., de Rochambeau H., Thebault R.-G.; Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases. EMBL; AY230009; AAP55850.1; -; mRNA. GO; GO:0008083; F:growth factor activity; IEA. InterPro; IPR002348; ILI_HBGF. Pfam; PF00167; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Fibroblast growth factor 5 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Danio rerio fibroblast growth factor 5 (fgf5) Submitted (NOV-2004) to the EMBL/GenBank/DDBJ (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Itoh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=fgf5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE SEQUENCE
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                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGREWYVALNKRGKAKRGCSPRVKPQH 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TrEMBLrel.
(TrEMBLrel.
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        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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                                           100.0%;
                                                                                       7.8%;
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Last sequence update)
Last annotation updat
                                           Score 21; DB 2; 
; Pred. No. 9.9e-1
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Pred. No.
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                                                                                                                                                                           329EAEDBE071308C CRC64;
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        Mismatches
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5e-18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
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                                                                                   Length 225;
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RESULT 11
Q4RPQ6 TETMG
Q4RPQ6, TETMG
Q4RPQ6, TETMG
ACC Q4RPQ6, TETMG
ACC Q4RPQ6, TETMG
DT 13-SEP-2
DT 
RESULT 12
QBWN07_CANFA PRELIMINARY;
ID QBWN07;
AC QBWN07;
DT 01-MAR-2002 (TrEMBLrel. 2
DT 01-MAR-2002 (TrEMBLrel. 2
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Maucell E., Bouneau L., Fischer C., Ozouf-Costez C., Bernot A.,
Walliam C., Saffe D., Fisher S., Luffalla G., Dossat C., Segurens B.,
Dasilva C., Salamoubat M., Levy M., Boudet N., Castellano S.,
Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,
Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
A Parra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.,
Kellis M., Volff JN., Guigo R., Zod., McC., Mesirov J.,
Kellis M., Volff JN., Guigo R., Zod., McC., Mesirov J.,
Kellis M., Schachter V., Quetier F., Saurin W., Scarpelli C.,
Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.;
"Genome duplication in the teleost fish Tetraodon nigroviridis reveals
the early vertebrate proto-karyotype.";
                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QARPQ6 TETMG PRELIMINARY;
QARPQ6;
13-SEP-2005 (TrEMBLrel. 31, C
13-SEP-2005 (TrEMBLrel. 31, L
13-SEP-2005 (TrEMBLrel. 31, L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Growth factor.
NON TER 23
SEQUENCE 230
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Eukaryota; Metazoa; Chordata; Cranitata; Vertebrata; Euteleostemi;

Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei

Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;

Tetradontoidea; Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PRO0263; HBGFFGF.
PRINTS; PR00262; IL1HBGF.
ProDom; PD00083; IL1 HBGF; 1.
SMART; SM00442; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEOTIDE SEQUENCE.

Genoscope; Whitehead Institute Centre for Genome Research;
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
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EMBL; CAAE01015007; CAG09626.1; -;
InterPro; IPR002209; GF heparin_bd.

InterPro; IPR002348; III_HBGF.
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EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00247; HBGF_FGF; 1.
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                                                                                                                                                                                                                                                                                                                                                                  Similarity 100.0%; | 19; Conservative 0;
                                                                                                                                                                                                                                                                                    DDCKFRERFQENSYNTYAS
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                                                                                          PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                  7.1%; Score 19; DB 2; I
100.0%; Pred. No. 9.3e-10;
ive 0; Mismatches 0;
   20,
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Last annotation update)
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                                                                                          PRT;
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RESULT 13
O13543 YEAST
ID O13543 YI
AC O13543;
DT O1-JAN-1:
DT O1-JAN-2:
DE Y1r294CP
GN OrderedL.
OS Saccharo)
OC Eukaryot.
OC Saccharo)
OC MCBI_Tax
RP NUCLEOTI
RX MEDLINE=
RA Ansorge
RA Johnston
RA Ansorge
RA Heumann
RA Koetter
RA Heumann
RA Koetter
RA Hohl T.M
RA Rinke M.
RA Pohl T.M
RA Warhasse
RA Wambutt
RA Hani J.
RA Waterst
RN (2)
RA Submitte
RN Submitte
RN (1)
RA Cherry .
RA Cherry .
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Best Local S
Matches 16
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Cartwright J.M.;
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ c
EMBL; AF453760; AAL50825.1; -; Genomic_DNA.
HSSP; P08620; 11JT.
Ensembl; ENSCAFG0000008885; Canis familiaris.
GO; GO:0008083; F:growth factor activity; IEA.
InterPro; IPR002348; IL1_HBGF.
                                                                                                                                                                                                                                  Duesterhoeft A., Entian K.-D., Floeth M., Goffeau A., Hebling U., Heumann K., Heuss-Neitzel D., Hilbert H., Hilger F., Kleine K., Koetter P., Louis E.J., Messenguy F., Mewes H.-W., Miosga T., Moestl D., Mueller-Auer S., Nentwich U., Obermaier B., Piravandi E., Pohl T.M., Portetelle D., Purnelle B., Rechmann S., Rieger M., Fohl T.M., Rose M., Scharfe M., Scherens B., Scholler P., Schwager C., Schwarz S., Underwood A.P., Urrestarazu L.A., Vandenbol M., Verhaßelt P., Vierendeels F., Voet M., Volckaert G., Voss H., Werhaßelt P., Vierendeels F., Voet M., Volckaert G., Voss H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OrderedLocusNames=YLR294C;
Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        O13543 YEAST PRELIMINARY;
O13543;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NON_TER
                                                                                                                                                                                                                                                                                                                                                              MEDLINE=97313267; PubMed=9169871;
Johnston M., Hillier L.W., Riles L.,
Ansorge W., Benes V., Brueckner M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JAN-1998 (TrEMBLrel.
01-JAN-1998 (TrEMBLrel.
10-MAY-2005 (TrEMBLrel.
                                                                                                                            Pauley A.;
                                                                                                                                           NUCLEOTIDE SEQUENCE
                                                                                                                                                                                                         Hani J., Hoheisel J.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                Saccharomycetales;
NCBI_TaxID=4932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ylr294cp (YLR294C)
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                NUCLEOTIDE SEQUENCE
                                                 Submitted
                                                                 Waterston
                                                                                NUCLEOTIDE
                                                                                                                                                                                         The nucleotide sequence
                                                                                                                                                                                                                        Wambutt R.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Canis familiaris (Dog).
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Q7Y0C1;
01-OCT-2003 (1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.

Buell C.R., Yuan Q., Ouyang S., Liu J., Gansberger K., Jones K.M., Overton II L.L., Tsirrin T., Kim M.M., Bera J.J., Jin S.S., Overton II L.L., Tsirrin T., Kim M.M., Bera J.J., Hsiao J., Blunt S., Fadrosh D.W., Tallon L.J., Koo H., Zismann V., Hsiao J., Blunt S., Vanaken S.S., Riedmuller S.B., Utterback T.T., Feldblyum T.V., Yang Q.Q., Haas B.J., Suh B.B., Peterson J.J., Quackenbush J., White O., Salzberg S.L., Fraser C.M.;

White O., Salzberg S.L., Fraser C.M.;

Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                    PROSITE; PS01361; ZF_DOF_1; UNKNOWN_1.
PROSITE; PS50884; ZF_DOF_2; 1.
SEQUENCE 349 AA; 35653 MW; 7C8BBF2
                                                                                                                                                                                                                                                                                                                             EMBL; AC099043; AAP50963.1; -; Gramene; Q7Y0C1; -. Go; GO:0003677; F:DNA binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oryza sativa (japonica cultivar-group).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                  InterPro; IPR003851; Znf_Dof.
Pfam; PF02701; zf-Dof; 1.
                                                                                                                                                                                                                                                                                                                                                                                     Submitted (JUN-2003) to the EMBL/GenBank/DDBJ EMBL; AC099043; AAP50963.1; -; Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=OSJNBa0079B15.26;
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Hu Y., Vannberg F., Weger J., Kramer J., Moreira D., Kelley F.,
Zuo D., Raphael J., Hogle C., Jepson D., Williamson J., Camargo
Gonzaga L., Vasconcelos A.T., Simpson A., Kolodner R., Harlow B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE SEQUENCE.
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RESULT 15 Q54TY7 DICDI ID Q54TY7_DICDI PRELIMINARY;

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RP STRAIN-AX4;

RC STRAIN-AX4;

RA Eichinger L., Pachebat J.A., Gloeckner G., Rajandream M.-A.,

RA Eichinger L., Pachebat J.A., Gloeckner G., Rajandream M.-A.,

RA Sucgang R., Berriman M., Song J., Olsen R., Szafranski K., Xu Q.,

RA Tunggal B., Kummerfeld S., Madera M., Konfortov B.A., Rivero F.,

RA Tunggal B., Kummerfeld S., Madera M., Konfortov B.A., Rivero F.,

RA Hauser A.T., Lehmann R., Hamlin N., Davies R., Gaudet P., Fey P.,

RA Kerhornou A., Nie X., Hall N., Anjard C., Hemphill L., Bason N.,

RA Kerhornou A., Nie X., Hall N., Anjard C., Hemphill L., Bason N.,

RA Kerhornou A., Nie X., Hall N., Anjard C., Hemphill L., Bason N.,

RA Kerhornou A., Nie X., Hall N., Anjard E., Morio T., Rost R., Churcher C.,

RA Kooper J., Haydock S., van Driessche N., Cronin A., Goodhead I.,

RA Mauny D., Mourier T., Pain A., Lu M., Harper D., Lindsay R.,

RA Maury D., Mourier T., Pain A., Lu M., Harper D., Lindsay R.,

RA Mardroper A., Felder M., Thangavelu M., Johnson D., Knights A.,

RA Wardroper A., Felder M., Thangavelu M., Johnson D., Knights A.,

RA Urushihara H., Hernandez J., Rabbinowitsch E., Steffen D., Sanders M.,

RA Urushihara Y., Sharp S., Shmonds M., Spiegler S., Tivey A.,

RA Sugano S., White B., Walker D., Woodward J., Winckler T., Tanaka Y.,

RA Sugano S., White B., Walker D., Woodward J., Winckler T., Tanaka Y.,

RA Shaulsky G., Schleicher M., Weinstock G., Rosenthal A., Cox E.C.,

RA Williams J., Dear P.H., Noegel A.A., Barrell B., Kuspa A.;

"The genome of the social amoeba Dictyostelium discoideum.";

RL Nature 0.0-0 (2005).

CC DEMBLA/GenBank/DDBJ whole genome shotgun (WGS) entry which is

CC C preliminary data.
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13-SEP-2005 (TrEMBLrel. 31, Created)
17 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
17 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
18 MADS-box transcription factor:
19 Name=srtA; ORFNames=DB0214992;
10 Dictyostelium discoideum (Slime mold).
20 Eukaryota; Mycetozoa; Dictyostelium.
21 C NCBI TaxID=44689;
21 [1]
                                                                                                                                                                                                    Query Match
Best Local S
Matches 10
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GO; GO:0005634; C:nucleus; IEA.
GO; GO:0003700; F:transcription factor activity; IEA.
GO; GO:0003700; F:transcription DNA-dependent; IEA.
GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DNA-binding; Nuclear protein; Transcription; Transcription regulation.
SEQUENCE 418 AA; 47546 MW; BC86042A75C82D8A CRC64;
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Aae00640 Human fib
Aay31792 Human fib
Aab10296 Fibroblas
Aab61660 FGF5 prot
Abp54276 Human fib
Ada95451 Fibroblas
                                                                                                                                                                                            Description
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
145	151	151	151	151	151	151	151	151	151	151	151	151	151	151	176	182	182	182	195	195
54.1	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	65.7	67.9	67.9	67.9	72.8	72.8
176	268	267	267	267	267	267	267	267	267	267	267	266	266	266	176	266	266	266	268	268
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AAE00637	AAW53031	ADM94750	ABB99124	AAE18810	AAB50277	AAG65651	AAE00645	AAB50709	AAW22600	AAR48064	AAP82964	ABG72719	ABG74160	AAY87858	AAE00638	ABG72713	ABG73848	AAY87852	ADS20334	ADH92004
Aae00637	Aaw53031	Adm94750	Abb99124	Aae18810	Aab50277	Aag65651	Aae00645	Aab50709	Aaw22600	Aar48064	Aap82964	Abg72719	Abg74160	Aay87858	Aae00638	Abg72713	Abg73848	Aay87852	Ads20334	Adh92004
Human fib	Fibroblas	Human fib	Human fib	Human FGF	Human FGF	Human fib	Human fib	Human fib	Human fib	FGP-3 cDN	Encoded b	Recombina	Human fib	Human FGF	Human fib	Recombina	Human fib	Human FGF	Fibroblas	Fibroblas

ALIGNMENTS

Human; fibroblast growth factor-5; FGF-5; neoplasm; cytostatic; RCC; renal cell carcinoma; immunomodulator; gene therapy; carcinoma; breast; prostate; bladder; pancreas; TAA; tumour associated antigen; horseshoe kidney; Hippel-Lindau disease; acquired renal cystic disease; adult polycystic kidney disease; clone 10E4-1. WPI; 2001-290607/30. Hanada K, 02-OCT-1999; 29-SEP-2000; 2000WO-US026689 Homo sapiens. Human fibroblast growth factor-5 protein of ORF-2 from clone 10E4-1. 02-JUL-2001 AAE00642; AAE00642 standard; protein; 268 AA. (USSH) US DEPT HEALTH & HUMAN SERVICES 12-APR-2001. WO200125271-A2 Region Yang JC; (first entry) 99US-0157103P Location/Qualifiers 161. .220 161. .220 /label= Immunogenic_epitope

AAB50701 AAB85816

AAY08585 AAY32337 AAY90414 AAE00636 AAE04405

Aaw75715 Aay08585 Aay32337

Human ker
Human fib
Human fib
Human fib
Human fib
Human fib
FGF-5. 3/
Fibroblas
Fibrob

Aar70813 Aae00639

N-PSDB; AAD03941.

Aay90414 Aae00636 Aae04405 Aab50701

The present invention relates to a method for treating a subject having neoplasm expressing fibroblast growth factor-5 (FGF-5) comprises modulating an immune response to FGF-5 or FGF-5 expression or activity.

Claim 7; Page 99; 101pp; English.

Treating a subject having a neoplasm expressing fibroblast growth factor-5 (FGF-5), e.g. prostate, breast, bladder, or pancreas carcinoma, comprises modulating an immune response to FGF-5 or modulating FGF-5 expression or activity.

ADA95451 ADD66124 ADD962307 ADX69307 AAY31791 AAY31793 AAE70639 AAR70639 AAR7083

Adt97922 Human | Adx69307 Human | Aay31791 Human | Aay31793 Human |

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Best Local
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 Hanada
                                                                                                                                                                                                                             renal cell carcinoma; immunomodulator; gene therapy; carcino prostate; bladder; pancreas; TAA; tumour associated antigen; horseshoe kidney; Hippel-Lindau disease; acquired renal cyst adult polycystic kidney disease; clone 6A4-1.
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                                                                                                                                                                                                                                                                                                                                                                                                                               AAE00640 standard;
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                                                                                                                                                                                                                                                                                                                            Human fibroblast growth factor-5 (FGF-5) peptide #2
                                                                                                                                                                WO200125271-A2
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Yang
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ilarity 100.0%;
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Pred. No. 6.2e-247;
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                                                                                                                                                                                                                                                                                                                                from
                                                                                                                                                                                                                                                                             carcinoma;
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XX AAY3
XX AAY3
XX AAY3
XX AAY3
XX AAY3
XX Huma
DR Huma
XXX Fibs
XW reti
KW macc
KW tcaan
KW retien
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                Pibroblast growth factor 5; PGF-5; human; eye; retina; ocular disease; retinopathy; maculopathy; retinal degeneration; retinitis pigmentosa; macular degeneration; retinal detachment; retinal tear; macular hole; degenerative myopia; acute retinal necrosis syndrome; traumatic chorioretinopathy; Purtscher's retinopathy; oedema;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 246 AA;
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                                                                                                                                                                                                                                                            AAY31792 standard;
                                                                                                                                      Human fibroblast growth factor 5.
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                                                                                                                                                                                                                                                            protein; 268
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100.0%;
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; Pred. No. 5.7e-226;
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CC including the signal peptide. A claimed method of delaying, preventing or crescuing retinal cells from injury or death without causing angiogenesis CC or mitogenesis comprises administering an active FGF-5 polypeptide such CC as the present polypeptide. The retinal cells are: (a) retinal neurons CC selected from photoreceptors, retinal ganglion cells, displaced retinal cC ganglion cells, amacrine cells, displaced amacrine cells, horizontal and CC pigment epithelial cells. The method is used to treat photoreceptor cell cinjury or death caused by an ocular disease, retinal njury, light or CC retinal trauma. The ocular disease is especially selected from: CC retinal detachment; retinal teaser; retinopathy; retinal degenerative cC diseases; macular holes; degenerative myopia; acute retinal necrosis continopathy; oedema; ischemic conditions such as central or branch continopathy; oedema; ischemic conditions such as central or branch continopathy; retinal vision occlusion; collagen vascular diseases; thrombocytompenic continual vision occlusion; collagen vascular diseases; thrombocytompenic condisease and systemic lupus erythematosus (all claimed)
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Best Local S
Matches 237
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29-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents human fibroblast growth factor 5 (FGF-5),
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                                                                                                                                                                                                                                                                                                                                                                                                                                         al Similarity
237; Conser
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                                                                                                                                                                                                                                                                                                                                μ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      268
                                                                                                                                         LEI FAVSQG I VGI RGVF SNKFLAMSKKGKLHASAKFTDDCKFRER FQENSYNTYASAIHR
                            TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                         LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                                                                                                   SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                           SSPAASIGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                                                                                             MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
                                                                                                                                                                                                                                                                                                                                                                                MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ocular diseases.
TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            La Fleur M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-00041383.
99US-00240952.
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                                                                                                                                                                                                                                                                                                                                                                                                                                    88.4%; Score 237; DB 2; Lo
100.0%; Pred. No. 2.4e-217;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   retinal neuron death
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 268;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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8 B Ś 밁 S

5 밁

Sequence 268

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CC dermstrological, gastrointestinal, hepatic, respiratory, renal and CC cerebroprotective activity. (I) is useful for stimulating epithelial cell CC proliferation in patients suffering from wound, mucositis, ulcer such as CC venous statis ulcer, diabetic ulcer and cubitus ulcer. (I) is also useful CC diabetes, oral injury, gastrointestinal injury, gut toxicity, gastric CC ulcer, duodenal ulcer, epidermolysis bullosa, skin graft, skin disorder, CC renal failure, brain injury, breast tissue injury, urothelial damage, CC female reproductive tract disorder, intestinal fibrosis, procutitis, CC pulmonary fibrosis, pneumonitis, pleural retraction, hemopoletic syndrome CC and myelotoxicity. (I) is also useful for increasing the adherence of CC skin graft to wound beds and to stimulate re-epithelialization from the CC wound bed, to produce changes in hepatocyte proliferation, to reduce the CC side effects of gut toxicity, to regenerate skin in full and partial CC thickness skin defects, and to prevent and heal damage to lungs. KGF-2 Shows enhanced activity, increased stability, higher yield and better CC which is described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antiinflammatory; cytoprotective; dermatological; gastrointestinal; hepatic; respiratory; renal; cerebroprotective; mucositis; treatment; epithelial cell proliferation; inflammatory bowel disease; lung damage; liver disorder; diabetes; oral injury; gastrointestinal injury; gut toxicity; gastric; duodenal; epidermolysis bullosa; skin graft; skin disorder; renal failure; brain stillury; intestinal fibrosis; proctitis, female reproductive tract disorder; pulmonary fibrosis; preumonitis; pleural retraction; hemopoietic syndrome; myelotoxicity; preumonitis; pleural retraction; hemopoietic syndrome; myelotoxicity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel keratinocyte growth factor useful for promoting and accelerating wound healing, comprising at least 10 contiguous amino acids from a specific amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                            This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-FEB-1997;
23-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUN-1995;
13-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-441307/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mendrick D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-FEB-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fibroblast growth factor; FGF5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; keratinocyte growth factor; KGF-2; antiulcer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fibroblast growth factor FGF5 protein SEQ ID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMA-) HUMAN
                                                                                                                                                                                                                                                                                                                                                         invention describes a novel human keratinocyte growth factor, KGF-2 which has antiulcer, antidiabetic, antiinflammatory, cytoprotective, attological, gastrointestinal, hepatic, respiratory, renal and
                                                                                                                                                                                                                                                                                                                                                                                                                                   Fig
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96US-0023852P.
97US-0039045P.
97US-00862432.
97US-0055561P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jimenez P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhang J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Coleman
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14-JUL-1999; 99US-0143648P.
15-JUL-1999; 99US-014622P.
12-AUG-1999; 99US-014935P.
03-NOV-1999; 99US-0163375P.
22-DEC-1999; 99US-0171677P.
19-APR-2000; 2000US-0190322P.
19-MAY-2000; 2000US-0205417P.
30-JUN-2000; 2000US-00142343.
                                                                                                                                                                                                                                                                                                                                                 03-JUL-2000; 2000WO-US018328
                                                                                                                                                                                                                                                                                                                                                                                                 WO200102433-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                  pulmonary fibro
liver fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Keratinocyte growth factor; KGF-2; epithelial cell proliferation; wound; mucositis; ulcer; inflammatory bowel disease; liver disorder; lung damage, diabetes; oral injury; gastrointestinal injury; epidermolysis bullosa; renal failure; brain injury; proctitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB61660 standard;
                                               Disclosure;
                                                                                  A polynucleotide encoding the human kerat: stimulating epithelial cell proliferation
                                                                                                                                                                                                                                                                                                                                                                          11-JAN-2001
                                                                                                                        WPI; 2001-071578/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-APR-2001
                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI
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present invention relates to human keratinocyte growth factor (KGF-2, AAF31901 and AAB61657). The present sequence is a protein used in a uence homology comparison with human KGF-2. KGF-2 can be used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein.
                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
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                                                                                                                                              M, Jimenez
Moore PA, (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR 180
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                                              Fig
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                                               2; 591pp; English.
                                                                                                                                                 Coleman
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                                                                                                                                               Duan Di
man TA,
                                                                                                                                                                                     INC.
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Pred. No. 2.4e-217;
                                                                                                                                               Gruber JR,
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                                                                                  keratinocyte growth factor useful for ration in a patients that has e.g a
                                                                                                                                               Mendrick D,
Dillon PJ,
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                                                                                                                                                 , Zhang J;
Gentz RL;
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RESULT 6
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KW WOUN
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PR 08-J
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Best Local S
Matches 237
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                                                                                                                                                                                                                                                                                                          08-JAN-2001; 2001US-0259853F
26-APR-2001; 2001US-0286368F
09-NOV-2001; 2001US-0331168F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human fibroblast growth factor 5 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABP54276;
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                                                                                                                                                                                                                                                                                                                                                                                                                            04-JAN-2002; 2002WO-US000101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pulmonary epithelial cell; mucositis;
wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Keratinocyte growth factor 2; KGF-2; fibroblast growth factor 12; KGF-2 Delta28; inflammation; vulnerary; dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                        (HUMA-) HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
mes 237; Conserv
                                                                                                                  2003-018897/01.
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                                                                                                                                                                   Moore
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK
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                                                                                                                                                                                                 Jimenez
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                                                                                                                                                                                                                                                        GENOME
                                                                                                                                                                   Coleman
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                                                                                                                                                                                                                                                        SCI INC.
                                                                                                                                                                                              Duan DR,
                                                                                                                                                                   TA,
                                                                                                                                                                   , Rampy MA,
Gruber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  epidermolysis bullosa;
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                                                                                                                                                                   Mendrick D,
Dillon PJ,
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                                                                                                                                                                Gentz
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Treating inflammation comprises administering Keratinocyte Growth Factor -2Delta28 to a patient.

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RESULT 7
ADA954
ADA954
AC ADA9
XX ADA9
XX ADA9
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XX Kera
XX Kera
XX Kera
XX Kera
XX Kera
XX Kera
XX Widn
XX Vita
XX Infl
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Best Local Simi
Matches 237;
14-FEB-1995;
13-AUG-1996;
28-FEB-1997;
23-MAY-1997;
13-AUG-1997;
13-AUG-1997;
13-FEB-1998;
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Delta28 to a patient. Also described: (1) a method for stimulating the growth of pulmonary epithelial cells; or (2) a method of preventing mucositis. KgF-2 Delta28 has vulnerary and dermatological activities, and can be used in gene therapy. KgF-2 Delta28 is useful for treating inflammation, stimulating the growth of pulmonary epithelial cells or preventing mucositis. It can also be used for treating epidermolysis bullosa and for promoting wound healing. AB08294 to AB083130 and ABP54273 to ABP54311 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Keratinocyte growth factor 2; KGF-2; epidermal cell; keratinocyte; wrinkle; aged skin; skin strength; epidermal thickening; scarring reduction; cosmetic surgery; epithelial cell; liver; pancreas kidney; prostate; bladder; lung; oesophagus; wound healing; diabetes; ischaemic blockage; ischaemic injury; steroid; uraemia; malnutrition; vitamin deficiency; obesity; immunosuppression; radiation therapy; chemotherapy; anastromosis; ulcer; burn; mucositis; inflammatory bowel disease; inflammation; radiation-induced condition; viral hepatitis; liver fallure; pancreatitis; lung damaging condition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADA95451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADA95451 standard; protein; 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 268 AA;
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                                                                                                                                                                                                                                                      01-JUL-1999;
                                                                                                                                                                                                                                                                                                                   24-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fibroblast growth factor (FGF) polypeptide #3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  renal failure;
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95WO-US001790.
96US-0023852P.
97US-0039405P.
97US-00862432.
97US-0055561P.
97US-00910875.
98US-00023082.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fibroblast growth factor; FGF
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100.0%; Pred. No. 2.4e-217;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       liver; pancreas;
ling; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  condition;
condition;
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RESULT 8
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AC ADD6
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DT 15-J
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DE Fibr

ADD66124;

ADD66124

standard;

protein;

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TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK

60 60

15-JAN-2004

(first entry)

Fibroblast growth factor,

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                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to Keratinocyte Growth Factor 2 (KGF-2)
CC polypeptides and the polynucleotides encoding them. The KGF-2
CC polypeptides are useful for stimulating the proliferation of epidermal
CC cells (e.g. keratinocytes) to prevent or improve the appearance of
CC wrinkles or aged skin, improve skin strength, promote epidermal
CC thickening, reduce scarring or improve healing after cosmetic surgery.
CC The KGF-2 polypeptide is also useful for stimulating epithelial cells
CC (e.g. epithelial cells of the liver, pancreas, kidney, prostate, bladder,
CC lung or ossophagus) or promoting wound healing in a wound healing
CC steroids, non-steroid compounds, uraemia, malnutrition, vitamin
CC deficiencies, obesity, infection, immunosuppression, radiation therapy or
CC deficiencies, obesity, infection, immunosuppression, radiation therapy or
CC chemotherapy). The wound may be caused by surgery (e.g. colonic or
CC gastrointestinal surgical procedures such as anastomosis), ulcers, burns,
CC etc. The KGF-2 polypeptide is also useful for treating or preventing
CC disease (e.g. ulcerative collitis or crohn's disease), inflammation (e.g.
CC condition (e.g. oral injury, pulmonary fibrosis, myelotoxicity), viral
CC pancreatitis, lung damaging conditions (e.g. emphysema, lung cancer,
CC pancreatitis, lung damaging conditions (e.g. emphysema, lung cancer,
CC asthma), or renal failure. The polypeptide is further useful for
CC radiation, or promoting tissue exposed to radiation (e.g.
CC radiation, or promoting tissue exposed to radiation.
CC radiation for treating malignancy) or protecting tissue to be exposed to
CC radiation for treating tissue exposed to radiation.
CC a fibroblast growth factor (FGF) polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 237; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New Keratinocyte Growth Factor (KGF-2) polypeptides and polynucleotides, useful for treating or preventing mucositis or Crohn's disease, reducing scarring, or improving wound healing or skin strength.
                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 268 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig 2; 195pp; English.
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                  181
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Moore PA, Coleman
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                                                                                         LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR 180
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                                                                                                                                                                                                                                                                         MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                                                                                                                                  MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
                                                                 LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                                      SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                              88.4%; Score 237; DB 6 100.0%; Pred. No. 2.4e-
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A, Gruber JR,
                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                   DB 6; Length 268;
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Dillon PJ,
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                                                                                                                                                                                                                                                                                                                                         Gaps
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The invention relates to an isolated polypeptide comprising a sequence CC having 95% identity with amino acid residues 138 (Gly)-208 (Ser), 123 (Val)-CC 208 (Ser), 104 (Glu)-208 (Ser), 77 (Val)-208 (Ser), 69 (Ser)-208 (Ser), 63 (Ala)-CC 208 (Ser), 36 (Thr)-153 (Lys) or 138 (Gly)-208 (Ser), 63 (Ala)-CC 153 (Lys), 36 (Thr)-153 (Lys) or 138 (Gly)-208 (Ser) of human keratin growth CC factor-2 (KGF-2) appearing as ADD56111. Also included are an isolated CC polynucleotide encoding the polypeptide, a method of making a recombinant host cell, a recombinant vector, a method of producing the polypeptide, a method of stimulating proliferation of epidermal cells, a method of stimulating proliferation of epidermal cells, a method of cells, a method of treating the polypeptide, a method of streating inflammator, a method of treating underscaused by a colonic or cell control testinal surgical procedure, a method of treating or preventing compositis, a method of promoting inflammatory bowel disease, a method of creating inflammatory bowel disease, a method of creating inflammatory bowel disease, a method of creating tissue exposed to radiation or protecting tissue to be exposed control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating or preventing urothelial healing, a method of control treating urothelial healing, hair growth or repair in the female control treating urothelial healing, hair growth or repair in the female urothelial urothelial urot
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13-AUG-1996;
28-FEB-1997;
13-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   preparing a composition healing, hair growth,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New Keratinocyte Growth Factor-2 (KGF-2) preparing a composition for reducing inf healing, hair growth, or treating or pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fibroblast growth factor; keratinocyte growth factor-2; KGF-2; epidermal cell proliferation; epithelial cell proliferation; wound healing; colonic surgery; gastrointestinal surgery; mucositis; inflammatory bowel disease; inflammation; hair growth; radiation damage; tissue growth; female genital tract repair; urothelial healing; viral hepatitis; liver failure; pancreatitis; lung damaging condition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure;
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(NIJJ/)
(MOOR/)
(COLE/)
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(JIME/)
(DUAN/)
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GRUBER J R.
DILLON P J.
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ZHANG J.
NI J.
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JIMENEZ
DUAN D R
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inflammation, promoting wound
preventing liver or renal failure
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Best Local S
Matches 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 buccal mucosa; Lungur, Gen; lung disease; Lungur, Keratolytic; respiratory-Gen; lung disease; Lungur, inhalation injury; hyaline membrane disease; infant respiratory distress syndrome; bronchiopulmonary dysplasia; infant respiratory distress syndrome; bronchiopulmonary dysplasia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genital tract, treating tissue exposed to radiation or protecting to be exposed to radiation, or treating or preventing viral hepati liver or renal failure, pancreatitis or lung damaging condition. T present represents a fibroblast growth factor showing sequence simple present represents a fibroblast growth factor showing sequence simple present represents a fibroblast growth factor showing sequence simple present represents a fibroblast growth factor showing sequence simple present represents a fibroblast growth factor showing sequence simple present represents a fibroblast growth factor showing sequence simple present represents a fibroblast growth factor showing sequence simple presents a fibroblast growth factor showing sequence showing sequence for the fibroblast growth factor showing sequence showing sequence fibroblast growth factor showing sequence fibroblast growth factor showing sequence fibroblast growth fibroblast growth factor showing sequence fibroblast growth f
                                                                                                                                                                                                                                                      Stimulating (MI) proliferation of lung epithelial cells, o hyperkeratosis of the buccal mucosa, tongue and esophagus, administering to individual polypeptide having specific am residues of keratinocyte growth factor.
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buccal mucosa; tongue; oesophagus; keratinocyte growth
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                                                                                                                                                                                        Disclosure;
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; Pred. No. 2.4e-217;
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h factor; KGF-2;
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This invention relates to a novel method of stimulating proliferation of lung epithelial cells, or inducing hyperkeratosis of the buccal mucosa, tongue and oesophagus. The method involves administering to an individual

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RESULT 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Heparin binding protein; Neuroprotective; Nootropic; Antiparkinsonian; Anticonvulsant; VEGF-3 receptor; Angiogenesis stimulator; Gene Therapy; vascular endothelial growth factor receptor 3; VEGFR-3; angiogenesis disorder; neurodegenerative disorder; Alzheimers disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 268 AA;
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12-JUN-2003; 2003US-0478390P.
23-SEP-2003; 2003US-00669176.
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   (LUDW-) LUDWIG INST CANCER RES
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Pred. No. 2.4e-217;
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RESULT 11
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New heparin-binding Vascular Endothelial Growth Factor Receptor 3 ligands comprising prepro-VEGF-C, prepro-VEGF-D sequences or fragments, for
                                                                                                                                                                                                                                                                                    Pibroblast growth factor 5; PGF-5; human; eye; retina; ocular diretinopathy; maculopathy; retinal degeneration; retinitis pigmen macular degeneration; retinal retinal tear; macular degenerative myopia; acute retinal necrosis syndrome; traumatic chorioretinopathy; Purtscher's retinopathy; oedema; retinal vision occlusion; collagen vascular disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY31791 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 268 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Huntington's disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQFGPAATDRNPRGSSSRQSSSSAMSSSSAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              не Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
      99WO-US005375
                                                                                                                                                                                                                                                             purpura; uveitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tammela
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 237; pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                          retinal
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                                                                                                                                                                                                                                                                vasculitis; therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 268
                                                                                                                                                                                                                                                                                                                                                                                                                   retinitis pigmentosa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ocular disease;
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ARY31793
ID AAY31793
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XX DF O6-DE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents human fibroblast growth factor 5 (FGF-5) mature CC polypeptide. A claimed method of delaying, preventing or rescuing retinal CC cells from injury or death without causing angiogenesis or mitogenesis CC comprises administering an active FGF-5 polypeptide such as the present CC polypeptide. The retinal cells are: (a) retinal neurons selected from CC photoreceptors, retinal gangilon cells, displaced retinal gangilon cells, displaced retinal gangilon cells or (b) supportive cells selected from Muller cells and pigment epithelial CC caused by an ocular disease, retinal injury, light or environmental CC trauma. The ocular disease, retinal injury, light or environmental CC pigmentos; macular degeneration, including age-related; retinal CC detachment; retinal tears; retinopathy; retinal degenerative disease; cmacular holes; degenerative myopia; acute retinal necrosis syndrome; cratinopathy; oedema; ischemic conditions such as Purtscher's craimantic chorioretinopathies or contusion, such as Purtscher's craimant vision occlusion; collagen vascular disease; thrombocytompenic curpura; uveitis; retinal vasculitis and occlusion associated with Eales of the collagen vascular disease; thrombocytompenic contusion associated with Eales of contusion and collusion associated with Eales
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 216
                   Fibroblast growth factor 5; FGF-5; human; eye; retina; ocular disease; retinopathy; maculopathy; retinal degeneration; retinitis pigmentosa; macular degeneration; retinal detachment; retinal tear; macular hole;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 248 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Fig 8; 52pp; English.
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29-JAN-1999;
                                                                                                                    Human fibroblast
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                                                                                                                                                                                                                                                          AAY31793 standard; protein; 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kljavin IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
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DB; AAX87991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAASSSPAASLGSQGSGLEQSSFQW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRG
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                                                                                                                                                                                                                                                                                                                                                                                                            CSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQW
                                                                                                                                                                                                                                                                                                                                                                            CSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ļa Fleur
  myopia; acute retinal
                                                                                                                                                                  (first entry)
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99US-00240952.
                                                                                                                  growth factor 5 mature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 216;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
  necrosis syndrome;
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                                                                                                                  polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
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AAB00639 standard;

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                                                                                                                                                                                                                                                                                                                                                                                                   This sequence represents human fibroblast growth factor 5 (FGF-5) mature collypeptide. A claimed method of delaying, preventing or rescuing retinal cells from injury or death without causing angiogenesis or mitogenesis comprises administering an active FGF-5 polypeptide such as the present photoreceptors, retinal ganglion cells, displaced retinal ganglion cells, displaced retinal ganglion cells, displaced retinal ganglion cells, orizontal and bipolar neurons cells, displaced amacrine cells, horizontal and bipolar neurons; or (b) supportive cells selected from Muller cells and pigment epithelial cells. The method is used to treat photoreceptor cell injury or death caused by an ocular disease, retinal injury, light or environmental trauma. The ocular disease is especially selected from: retinitis pigmentosa; macular degeneration, including age-related; retinal cetactions; retinal tears; retinopathy; retinal degenerative diseases; macular holes; degenerative myopia; acute retinal necrosis syndrome; traumatic chorioretinopathies or contusion, such as central or branch retinal vision occlusion; collagen vascular diseases; thrombocycompenic purpura; uveitie; retinal vasculitis and occlusion associated with Eales
                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                    Matches 215;
                                                                                                                                                                                                                                                                                                                                                     Sequence 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 traumatic chorioretinopathy; Purtscher's retinopathy; oedema; retinal vision occlusion; collagen vascular disease; thrombocytompenic purpura; uveitis; retinal vasculitis; therapy
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29-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel method using FGF-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
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                                                                                                                                                                                                              N
                                                                                                                                                             PSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVESNKFL
                                                                                                                                                                                                                                EKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSASSSPAASIGSQGSGLEQSSPQWS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ocular diseases
                                                                                                      AMSKKGKLHASAKFIDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGC 202
                                                                                                                                                                                                              EKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWS
SPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                     AMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGC
                                                                                                                                         PSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFL
                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                        systemic
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                                                                                                                                                                                                                                                                                                  80.2%;
                                                                                                                                                                                                                                                                                                                                                                                        lupus erythematosus
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                                                                                                                                                                                                                                                                                Score 215; DB 2; L; Pred. No. 2.2e-196; 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                          (all claimed)
   216
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                                                                                                                                                                                                                                                                                                                      247;
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                                                                                                                                                                                                                                                                                                                       treating or preventing a neoplasm such as prostate carcinoma, breast carcinoma, bladder carcinoma, pancreas carcinoma, and renal cell carcinoma (RCC) and diseases such as Hippel-Lindau disease, horseshoe kidneys, adult polycystic kidney disease and acquired renal cystic disease. FGF-5 polypeptides may be used as immunogen in the production of antibodies, which are useful in quantitative immunoassays that determine concentrations of antigen-bearing substances in biological samples, and to (semi-)quantitatively identify the presence of antigen in a biological sample. The antibodies may also be used to treat FGF-5 expressing or overexpressing tumours by decreasing FGP-5 activity, as diagnostic agents to monitor the progression or regression of an FGF-5 expressing or overexpressing tumour in a patient undergoing therapy for the treatment of neoplasm. FGF-5 CDNA is also useful in gene therapy. The present sequence is a human FGF-5 peptide from clone 6A4-1
                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         neoplasm expressing fibroblast growth factor-5 (FGF-5) comprises modulating an immune response to FGF-5 or FGF-5 expression or activity FGF is a tumour associated antigen (TAA). The method is useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a method for treating a subject having neoplasm expressing fibroblast growth factor-5 (PGF-5) comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression or activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating a subject having a neoplasm expressing fibroblast growth factor-5 (FGF-5), e.g. prostate, breast, bladder, or pancreas carcinoma, comprises modulating an immune response to FGF-5 or modulating FGF-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-290607/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hanada K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; fibroblast growth factor-5; FGF-5; neoplasm; cytostatic; renal cell carcinoma; immunomodulator; gene therapy; carcinoma; prostate; bladder; pancreas; TAA; tumour associated antigen; horseshoe kidney; Hippel Lindau disease; acquired renal cystic d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-JUL-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                       Similarity
                        RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                                                                                                                             GSSSRQSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
                                                                                                                                                                                 GSSSRQSSSSAMSSSSAASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 92; 101pp; English
                                                                                                 IYPDGKVNGSHBANMLSVLBIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                                                                                                                                                                                                                            246 AA;
 RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                                                      IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yang JC;
                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                     72.8%; Score 195; DB 4; 100.0%; Pred. No. 2.7e-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             factor-5 (FGF-5) peptide
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                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                     .7e-177;
                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                        Length 246;
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                                                                                                                                                                                                                     Indels
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RESULT 14
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                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 195; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel fusion proteins comprise FGF linked to saporin. FGF-1 to -9 may be used, pref. FGF-1 (AAR70812), FGF-5 (AAR70813), FGF-7 (AAR70814) or FGF-1 (AAR70815) muteins, in which at least 1 Cys residue is replaced by conservative Ser substitutions. The fusion proteins are potent cytocidal agents to cells bearing the FGF receptor. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New monogenous preparations of cytotoxic conjugates and DNA -fibroblast growth factors and cytotoxic agents for treating RC conditions such as tumours, diabetes and rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference
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01-SEP-1995
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                                                                                                                                                                                                                                                                                                                                                                         Sequence 268 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 112; 128pp; English.
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29-OCT-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                              correct PN
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RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                                    IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                  IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                                                                                                                                               GSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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                                                                                                                                                             GSSSRQSSSSAMSSSSAASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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                                                                                                                                                                                                                                                                                                                                                                                                                              field.)
                                                                                                                                                                                                                                                                   72.8%; Score 195; DB 2; Lo larity 100.0%; Pred. No. 2.9e-177; Conservative 0; Mismatches 0;
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93US-00145829.
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RESULT 15
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                                                                                                                                                    CC AAR80776-84 are fibroblast growth factors (FGF) FGF-1 to FGF-9 CC crespectively. DNA encoding these fibroblast growth factors can be used to CC create an FGF/saporin fusion protein. DNA encoding such fusion proteins CC are useful for targetting saporin (a cytotoxin) to a cell carrying the CC include in partic. DNA encoding a therapeutic protein, antisense DNA or CC increases serum stability or intracellular availability of the TA. The CC conjugates of the invention are used to inhibit cell proliferation in CC cells carrying the particular growth factor receptor; also when TA is DNA CC it can be used to deliver this to cells (for gene therapy). A specific capplication is to prevent excessive proliferation of epithelial cells, CC ibroblasts and keratinocytes in the anterior eye after surgery, partic. CC to prevent recurrence of pterygii after surgical removal, closure of crabeculectomy after glaucoma surgery and corneal clouding after excimer CC laser treatment. Other conditions which may be treated include tumours, CC restenosis, psoriasis, Dupuytren's contracture, diabetic complications, CC Kaposi's sarcoma and rheumatoid arthritis
                                                            Query Match
Best Local Similarity
Matches 195; Conserv
                                                                                                                              Sequence 268 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 33; Page 144; 204pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New conjugates of growth factor receptor ligand and targetted agent - partic. DNA or cytotoxin, used to control cell proliferation in the eye, e.g. to prevent growth of pterygii and corneal clouding.
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15-MAR-1994;
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                  GSSSRQSSSSAMSSSSSAASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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                                                            72.8%; ilarity 100.0%; Conservative
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94US-00213447.
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                                                          Score 195; DB 2; L. Pred. No. 2.9e-177; 0; Mismatches 0;
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                    EQPELSFTVTVPEKK 237
                                                                                                                            IYPDGKVNGSHEANMLSVLBIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF 162
 EQPELSFTVTVPEKK 237
                                                        RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                                                                   RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS 222
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Search completed: April 11, 2006, 03:33:13 Job time : 78 secs

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Minimum DB
Maximum DB
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Copyright (c) 1993 - 2006 Biocceleration Ltd.
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US-09-240-952-2
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US-09-345-373-15
US-09-345-373-15
US-09-240-952-3
US-09-240-952-3
US-09-240-952-5
US-08-439-725A-12
US-08-439-725A-12
US-08-438-439C-8
US-09-18-941-33
US-09-499-299-13
US-09-499-249-13
US-09-417-721-9
US-08-441-629-13
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US-08-776-627-73-13
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28 172 64.2 219 4 PCT-USS5-09172-13 Sequence 13, Appl 100 1515 56.3 266 2 US-08-410-721-25 Sequence 15, Appl 101 151 56.3 267 2 US-08-410-721-25 Sequence 15, Appl 101 151 56.3 267 2 US-08-410-721-25 Sequence 13, Appl 101 151 56.3 267 2 US-08-420-101-791-13 Sequence 13, Appl 101 151 56.3 267 2 US-08-20-101-791-13 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-101-791-13 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-101-791-13 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-101-791-14 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-20-701-14 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-701-24 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-701-24 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-701-24 Sequence 14, Appl 101 151 56.3 268 2 US-08-20-701-24 Sequence 2, Appl 101 101 101 101 101 101 101 101 101 10
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Sequence 13, A 9C-13 Sequence 13, A 9C-14 Sequence 13, A 9-13 Sequence 13, A 9-13 Sequence 13, A 9-14 Sequence 13, A 9-15 Sequence 14, A 9-17 Sequence 14, A 1-10 Sequence 2, Ap 1-20 Sequence 4, Ap 1-30 Sequence 6, Ap 1-30 Sequence 6, Ap 1-30 Sequence 10, Ap 1-30 Sequence 10, Ap 1-30 Sequence 2, Ap 1-40 Se
Sequence 13, A 9C-18 Sequence 18, A 9C-19 9C-13 Sequence 13, A 9B-13 Sequence 13, A 9B-13 Sequence 13, A 9C-14 Sequence 13, A 9C-14 Sequence 14, A 9C-14 Sequence 14, A 9C-14 Sequence 14, A 9C-14 Sequence 14, A 9C-14 Sequence 16, A 9C-14 Sequence 17, A 9C-14 Sequence 10, A 9C-14 9C-
Sequence 13, Appl Sequence 13, Appl Sequence 15, Appl Sequence 13, Appl Sequence 13, Appl Sequence 13, Appl Sequence 14, Appl Sequence 14, Appl Sequence 17, Appli Sequence 17, Appli Sequence 17, Appli Sequence 2, Appli Sequence 2, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 2, Appli Sequence 30, Appli Sequence 2, Appli Sequence 30, Appli Sequence 2, Appli Sequence 2, Appli Sequence 30, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 30, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 30, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 30, Appli Sequence 2, Appli Sequence 2, Appli Sequence 10, Appli Sequence 2, Appli

US-09-023-082A-15

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Sequence 15,
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                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: STEPPPE, BRIC K.
REGISTRATION UNMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                                          TELEFAX: 202-371-2340 INFORMATION FOR SEQ ID NO: 15: SEQUENCE CHARACTERISTICS:
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APPLICANT:
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PRIOR APPLICATION NUMBER: US 08/862,432
APPLICATION NUMBER: US 08/862,432
APPLICATION NUMBER: US 08/862,432
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PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: PCT/US95/01790
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C. STREET: 1100 NEW YORK AVE, NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
                                                                                                                                                                                                                                                                              FILING DATE: 13-AUG-1997 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FILING DATE: 13-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: PCT/I
FILING DATE: 14-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
PILING DATE: 05-JUN-1995
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APPLICATION NUMBER: US,
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 MOLECULE TYPE:
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RIOR APPLICATION UNATA:
US 08/910,875
              STRANDEDNESS:
TOPOLOGY: no
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                                                 TYPE: amino acid
                                                                                                                                                                                                                                                            APPLICATION NUMBER:
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DUAN, D. ROXANNE
RAMPY, MARK A.
                                                                   268 amino acids
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protein
                                  not relevant
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Query Match

88.4%; Score 237;

DB 2;

Length 268;

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Best Local Similarity 100.
---- 237; Conservative
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APPLICANT: Kljavin, Ivar
APPLICANT: La Fleur, Mon
                                                                                                                                                                                                                                                         TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
PRIOR APPLICATION UNMBER: 09/041
APPLICATION UNMBER: 09/041
FILING DATE: 12-Mar-98
ATTORNEY/AGENT INFORMATION:
NAME: SYODODA, CTailg G.
REGISTRATION NUMBER: 39,04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/240,952
PILING DATE: 29-Jan-1999
                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: P1
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: C
                                                                                                                                                                                                          TYPE: Ami
TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                TELEPHONE:
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                                                                                                                                                                                                                            Amino Acid
$$PAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
                                                                         MSLSFILLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
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                                                     MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
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Method of Preventing the Dea
Wewrons and Treating Ocular
                                                                                                                      88.4%; Score 237; DB 2; Lo
100.0%; Pred. No. 5.6e-216;
tive 0; Mismatches 0;
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0; Mismatches 0;
                                                                                                                                                          DB 2; Length 268;
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Sequence 15, Application US/09610651
Patent No. 6693077
GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
APPLICANT: Jimenez, Pablo
APPLICANT: Duan, D. Roxanne
APPLICANT: Rampy, Mark A.
APPLICANT: Mendrick, Donna
APPLICANT: Mendrick, Donna
APPLICANT: Mi, Jian
APPLICANT: Ni, Jian
APPLICANT: Ni, Jian
APPLICANT: Moore, Paul A.
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LENGTH: 268
TYPE: PRT
ORGANISM: Homo s
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Best Local S
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APPLICANT: Rampy, Mark A.
APPLICANT: Mendrick, Donna
APPLICANT: Russell, Deborah
APPLICANT: Louie, Arthur
   APPLICANT:
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                                                                                                                                                                                                                                                                   TEKTGREMYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                                                                                                                                                                                TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
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Moore, Paul A.
Coleman, Timothy A.
Gruber, Joachim R.
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100.0%; Pred. No. 5.6e-216;
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; ORGANISM: Homo
US-09-610-651-15
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PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: 09/34
PRIOR FILING DATE: 1999-07-01
PRIOR APPLICATION NUMBER: 60/14
PRIOR FILING DATE: 1999-07-02
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PRIOR FILING DATE: 1997-02
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1997-08
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1997-08
                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: 1
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                                                                                                                                                                                                                                                                                             Best Local Similarity 100.0%;
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PRIOR FILING DATE: 2000-0
NUMBER OF SEQ ID NOS: 176
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PRIOR FILING DATE: 1996-08-13
PRIOR APPLICATION NUMBER: 08/1
PRIOR FILING DATE: 1997-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 1488.036000J
CURRENT APPLICATION NUMBER: US/09/610,651
CURRENT FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1999-0
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1999-1
PRIOR APPLICATION NUMBER:
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PRIOR FILING DATE: 1996-08-13
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PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1995-(
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PRIOR APPLICATION NUMBER: PCT/US95/01790
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                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 268
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APPLICATION NUMBER: 60/
FILING DATE: 1999-08-12
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                                                                                         LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR 180
                                                                                                                                                            SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                    TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                     LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                        SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
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                                                                                                                                                                                                                                                                           Conservative
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100.0%; Pred. No. 5.6e-216;
live 0; Mismatches 0;
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RESULT 6

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Patent No. 6903072
Patent No. 6903072
PATENTAL INFORMATION:
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                                                                                                                                                                                 FILING DATE: 13-AUG-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/055
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEFFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488
TELECOMMUNICATION INFORMATION:
TELECHONE: 202-371-2600
                                                                                                                 TELEPAX: 202-371-2540
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 268 amino acid
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APPLICANT:
APPLICANT:
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ADDRESSEB: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
                                                STRANDEDNESS:
TOPOLOGY: No.
MOLECULE TYPE: I
                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 23-MAY-PRIOR APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60
FILING DATE: 13-AUG-1996
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2 NUMBER OF SEQUENCES: 148
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TITLE OF IN
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APPLICATION NUMBER:
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PRIOR APPLICATION DATA:
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                                                                                                   TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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DUAN, D. ROXANNE
RAMPY, MARK A.
MENDRICK, DONNA
                                                                                                                   268 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: US 08/862,432
23-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                MBER: US 60/039,045
28-FEB-1997
                                                                No. 6903072 Relevant
6903072 Relevant
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88.4%;
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                                                                                                                                                                                                                                                                                                          US 60/055,561
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09/023,082
                                                                                                                                                                                                                       1488.0360008/EKS
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Query Match

Score 237;

DB 2;

Length 268;

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RESULT 7
US-10-075-446-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION NUMBER: US/10/075,446
FILING DATE: 15-Feb-2002
                  ATTORNEY/AGENT INFORMATION:
NAME: STEFFFE, ERIC K.
                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/023,082
FILING DATE: «Unknown»
APPLICATION NUMBER: PCT/US95/01790
FILING DATE: 14-FEB-1995
FILING DATE: 14-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
STREET: 1100 NEW YORK AVE, NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COLEMAN, TIMOTHY A.
GRUBER, JOACHIM R.
TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
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                                                      APPLICATION NUMBER: US 08/461,195
FILLING DATE: 05-UN-1995
APPLICATION NUMBER: US 60/023,852
FILLING DATE: 13-AUG-1996
APPLICATION NUMBER: US 60/039,045
FILLING DATE: 28-FEB-1997
APPLICATION NUMBER: US 08/862,432
FILLING DATE: 23-MAY-1997
APPLICATION NUMBER: US 08/910,875
FILLING DATE: 13-AUG-1997
APPLICATION NUMBER: US 60/055,561
FILLING DATE: 13-AUG-1997
APPLICATION NUMBER: US 60/055,561
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REGISTRATION NUMBER: 36,688
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DUAN, D. ROXANNE
RAMPY, MARK A.
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MOORE, PAUL A.
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US-09-240-952-3
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Best Local Similarity
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APPLICANT: Kljavin, Ivar
APPLICANT: La Fleur, Monique
TITLE OF INVENTION: Method of Preventing the Death of Retinal
TITLE OF INVENTION: Neurons and Treating Ocular Diseases
NUMBER OF SEQUENCES: 5
                                                       CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/041,38:
FILING DATE: 12-Mar-98
ATTORNEY/AGENT INFORMATION:
NAME: Svoboda, Craig G.
REGISTRATION NUMBER: 39,044
REFERENCE/DOCKET NUMBER: P108!
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1489
                    TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO: 15: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/240,952
FILING DATE: 29-Jan-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Genentech, Inc. STREET: 1 DNA Way
CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 268 amino acids
TYPE: amino acid
STRANDEDNESS: NO. 6916786 Relevant
TOPOLOGY: No. 6916786 Relevant
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
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CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        California
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100.0%; Pred. No. 5.6e-21
                                                                                                                                                                                                                09/041,383
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Patent No. 6331523
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 80.6%; So
Best Local Similarity 100.0%; F
Matches 216; Conservative 0;
                                        Query Match
    Best Local Similarity
Matches 215; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb fl.
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/99/240,952
FILING DATE: 29-Jan-1999
                                                                                                                                                                             TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 09/041,383
FILING DATE: 12-Mar-98
ATTORNEY/AGENT INFORMATION:
                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 247 amino acid
                                                                                                                                                                                                                 NAME: Svoboda, Craig G.
REGISTRATION NUMBER: 39,044
REFERENCE/DOCKET NUMBER: P1
TELECOMMUNICATION IMFORMATION:
TELEPHONE: 650/225-1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Kljavin, Ivar
APPLICANT: La Fleur, Monique
TITLE OF INVENTION: Method of Preventing the Death of Retinal
TITLE OF INVENTION: Neurons and Treating Ocular Diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                     TOPOLOGY:
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                                                                                                                  amino acid
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80.2%; Score 215; DB 2; Li
100.0%; Pred. No. 3.3e-195;
tive 0; Mismatches 0;
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Pred. No. 3.8e-196;
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                                      Length 247;
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Conservative

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US-08-439-725A-12
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GENERAL INFORMATION:
APPLICANT: Nathans, Jeremy
APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jennifer P.
APPLICANT: Macke, Jennifer P.
                                                                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PALENTIN PC-DOS/MS-DOS
SOFTWARE: PALENTIN Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/439,725A
FILING DATE: 12-MAY-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/047001
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTATE: USA
COUNTRY: USA
TTD: 92037
                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
-439-725A-12
                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: FIBROBROBLAST GROWTH FACTOR HOMOLOGOUS TITLE OF INVENTION: FACTOR-1 (FHF-1) AND METHODS OF USE NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
STRANDEDNESS: not
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
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RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                       IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF 162
                                                                IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                                                     GSSSRQSSSSAMSSSSASSSPAASIGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ 102
                                                                                                                                                  GSSSRQSSSSAMSSSSAASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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                                                                                                                                                                                                                                                                                                                                                                                    268 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                  72.8%; Score 195; DB 1; L
ilarity 100.0%; Pred. No. 2.9e-176;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                          not relevant
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                                                                                                                                                                                                                                        Length 268;
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US-08-464-590A-17
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Best Local Similarity 100.0%;
"Arches 195; Conservative (
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GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 17:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,590A
FILING DATE: 05-JUN-1995
CLASSIFICATION: 536
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: MULLINS, J. G.
REGISTRATION NUMBER: 30,073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,
ADDRESSEE: STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: 11 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 268 amino acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (201) 994-1700
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APPLICANT: ROSEN, CRAIG A.
TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR-11
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                                                                                            TYPE: STRANDEDNESS: SIN
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223
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o. 5763214
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                                                                                                                                                                                                           GSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ 102
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EQPELSFTVTVPEKK 237
                                                              RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
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                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                      72.8%; Score 195; DB 1; Le 100.0%; Pred. No. 2.9e-176;
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RESULT 12 US-08-207-412B-12

Sequence 12, Application US/08207412B Patent No. 5817485

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Best Local Similarity
Matches 195; Conserv
                                                                                                                         Sequence 12, Application US/08867471 Patent No. 5872226
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                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 268 amino acids
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STATE: NC
STATE: USA
COUNTRY: USA
TTP: 07068-1739
PJ
APPLICANT: Nathans, Jeremy
APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jennifer P.
TITLE OF INVENTION: FIBROBROBLAST GROWTH
TITLE OF INVENTION: FACTOR-1 (FHF-1) AND
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Ferraro, Gregory D
REGISTRATION NUMBER: 36,134
REGERENCE/DOCKST NUMBER: 325800-100
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-941700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Hu, Jing-Shan
TITLE OF INVENTION: Fibroblast Growth Factor-10
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: 11
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
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FILING DATE: 08-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Roseland
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72.8%; Score 195; DB 1; Lilarity 100.0%; Pred. No. 2.9e-176; Conservative 0; Mismatches 0;
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                    METHODS OF USE
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; LENGTH: 268 amino acids
; TYPE: amino acid
; STRANDEDNESS: not releva
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-867-471-12
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US-08-438-439C-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Mathans, Jeremy
APPLICANT: Smallwood, Phillip M.
APPLICANT: Macke, Jennifer P.
APPLICANT: Macke, Jennifer P.
TITLE OF INVENTION: FIBROBROBLAST GROWTH FACTOR
TITLE OF INVENTION: FACTOR-2 AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 536

PRIOR APPLICATION UNDER: 08/439,725

APPLICATION NUMBER: 08/439,725

FILING DATE: 12-MAY-1995

ATTORNEY/AGENT INFORMATION:

NAME: Haile, Lisa A.

REGISTRATION NUMBER: 38,347

REFERENCE/DOCKET NUMBER: 07265/0.

TELECOMMUNICATION INFORMATION:

TELECHNOME: 619/678-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 12:
                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
CITY: La Jolla
STATE: CA
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COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
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COMPUTER READABLE FORM:
                                                                                                                                                    NUMBER OF SEQUENCES:
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CITY: L
STATE:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0
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TELEPAX: 617/678-5099
                    COUNTRY: U
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MEDIUM TYPE: COMPUTER: IE

Floppy disk

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Sequence 33, Application US/08951822A
PRIENT NO. 5989866
GENERAL INFORMATION:
APPLICANT: Deisher, Theresa A.
APPLICANT: Deisher, Theresa A.
APPLICANT: Beisher, Thomas R.
APPLICANT: Bukowski, Thomas R.
APPLICANT: Holderman, Susan D.
APPLICANT: Holderman, Susan D.
APPLICANT: Holderman, Susan D.
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL FGF HOMOLOGS
FILE REFERENCE: 96-20
CURRENT APPLICATION NUMBER: US/08/951,822A
CURRENT APPLICATION NUMBER: US/08/951,822A
CURRENT APPLICATION NUMBER: US/08/951,822A
CURRENT APPLICATION NUMBER: US/08/951,822A
SOFTWARRE: FASTSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 268
TYPE: PRT
COGGANISM: Homo sapiens
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COMPATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/438,439C
FILING DATE: May 12, 1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Haile, Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/046001
FILECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5099
INFORMATION FOR SEQ ID NO: 8:
CEOTTENCE CHARACTERS
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US-08-951-822-33
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Query Match
Best Local Similarity
Matches 195; Conserv
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STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: protein
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LENGTH: 268 amino acids
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 72.8%; Score 195; Di
ilarity 100.0%; Pred. No. 2.9
Conservative 0; Mismatches
                   .9e-176;
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                   EQPELSFTVTVPEKK 237
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EOPELSFTVTVPEKK 237
                                                      RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                                                                                               IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
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Search completed: April 11, 2006, 03:43:02 Job time : 22 secs

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Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Perfect score:
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268
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1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*
Copyright
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GenCore version 5.1.7 (c) 1993 - 2006 Biocceleration Ltd.
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                                   Sequence 15, Appl Sequence 15, Appl Sequence 15, Appl Sequence 17, Appl Sequence 17, Appl Sequence 17, Appl Sequence 11, Appl Sequence 11, Appl Sequence 14, Appl Sequence 14, Appl Sequence 11, Appl Sequence 13, Appl Sequence 14, Appl Sequence 15, Appl Sequence 15, Appl Sequence 16, Appl Sequence 17, Appl Sequence 18, Appl Sequence 18,
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Sequence
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45	44	43	42	41	40	39	38	37	36	35	34	ω 3 3	32	31	30	29	28
9	9	10	10	10	10	10	11	11	82	82	144	144	151	151	151	151	151
3.4	3.4	3.7	3.7	3.7	3.7	3.7	4.1	4.1	30.6	30.6	53.7	53.7	56.3	56.3	56.3	56.3	56.3
9	9	502	359	109	10	10	287	173	82	82	144	144	268	267	267	267	267
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US-10-982-514-37	US-10-424-955A-36	US-11-097-143-23466	US-10-437-963-187082 .	US-10-451-467A-282	US-09-572-404B-3799	US-09-572-404B-3798	US-10-425-114-59971	US-10-767-701-41558	US-09-802-154-39	US-09-801-968-39	US-10-379-334-27	US-09-901-938-27	US-10-690-019-14	US-10-932-284-7	US-10-935-226-7	US-10-123-481-7	US-10-374-207-8
Sequence 37, Appl	Sequence 36, Appl	Sequence 23466, A	Sequence 187082,	Sequence 282, App	Sequence 3799, Ap	Sequence 3798, Ap	Sequence 59971, A	Sequence 41558, A	Sequence 39, Appl	Sequence 39, Appl	Sequence 27, Appl	•	Sequence 14, Appl	Sequence 7, Appli	Sequence 7, Appli	Sequence 7, Appli	Sequence 8, Appli

ALIGNMENTS

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Dublication No. US20030077695A1
Publication No. US20030077695A1
Publication No. US20030077695A1
Publicant: RIPERNATION:
APPLICANT: MIRKNEZ, PABLO
APPLICANT: DUAN, D. ROXANNE
APPLICANT: MENDRICK, DONNA
APPLICANT: MENDRICK, DONNA
APPLICANT: MENDRICK, DONNA
APPLICANT: COLEMAN, TIMOTHY A.
APPLICANT: MOORE, PAUL A.
APPLICANT: GENTZ, REINER L.
APPLICANT: GENTZ, REINER L.
TITLE OF INVENTION: KERRITNOCYTE GROWTH FACTOR-2
MINMBER OF SEQUENCES: 14
UNUMBER OF SEQUENCES: 14
UNUMBER: DOCUMENT AND STATES
APPLICATION NUMBER: US/09/345,373
FILING DATE: 05-UNU-1995
FILING DATE: 05-UNU-1995
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FRIOR APPLICATION NUMBER: US 60/023,852
FRIOR APPLICATION NUMBER: US 60/023,852
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/023,852
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,045
FRIOR APPLICATION DATA:
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REGISTRATION NUMBER: 36,688

REFERENCE/DOCKET NUMBER: 1488

TELECOMMUNICATION INFORWATION:

TELEPHONE: 202-371-2600

TELEPAX: 202-371-2540

INFORMATION FOR SEQ ID NO: 15:

SEQUENCE CHARACTERISTICS:

LENGTH: 268 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 237; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15, Application No. US2003 GENERAL INFORMATION:
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APPLICATION NUMBER: US 08/:
FILING DATE: 13-AUG-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/:
FILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 268 amino acids
TYPE: amino acid
STRANDEDNESS: No. US20030077695A1 Relevant
TOPOLOGY: No. US20030077695A1 Relevant
ZIP: 2005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHIT Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                           TITLE OF INVENTION: KERATINOCYTE GROWTH FACTOR-2
NUMBER OF SEQUENCES: 148
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX
STREET: 1100 NEW YORK AVE, NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
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                                                                                                                                                          STATE: DC
                                                                                                                                      COUNTRY: USA
                                                                                                                                                                            CITY: WASHINGTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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JIMENEZ, PABLO
DUAN, D. ROXANNE
RAMPY, MARK A.
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MOORE, PAUL A.
COLEMAN, TIMOTHY A.
GRUBER, JOACHIM R.
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100.0%; Pred. No. 4.8e-210;
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                      #1.0,
                                                                                                                                                                                               GOLDSTEIN & FOX, P.L.L.C.
                    Version
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LENGTH: 268 amino acids
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TYPE: amino acids
;
STRANDEDNESS: NO. US20030129687A1 Relevant
;
TOPOLOGY: NO. US20030129687A1 Relevant
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-10-075-446-15
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Publication No. US20030186904A1
GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
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Best Local Similarity
                       APPLICANT:
                                                             APPLICANT:
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APPLICATION NUMBER: 09/023,082

PILING DATE: «Unknown»

APPLICATION NUMBER: PCT/US95/01790

PILING DATE: 14-FEB-1995

APPLICATION NUMBER: US 08/461,195

PILING DATE: 05-UN-1995

APPLICATION NUMBER: US 60/023,852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 60/055,561
PILING DATE: 13-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEFFFE, ERIC K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 13-AUG-1996
APPLICATION NUMBER: US 60/039,045
FILING DATE: 28-FEB-1997
APPLICATION NUMBER: US 08/862,432
FILING DATE: 23-MAY-1997
APPLICATION NUMBER: US 08/910,875
FILING DATE: 13-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                     TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SSPAASLGSQGSGLEQSSPQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER:
Moore, Paul A. Coleman, Timothy A. Gruber, Joachim R.
                                                                                                                                        Ruben, Steven M.
Jimenez, Pablo
Duan, D. Roxanne
                                                          Zhang, Jun
Ni, Jian
                                                                                                  Rampy, Mark A.
Mendrick, Donna
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88.4%; Score 237; DB 4; Lo
100.0%; Pred. No. 4.8e-210;
tive 0; Mismatches 0;
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US-10-733-311-15
; Sequence 15, Application US/10733311
; Publication No. US20040224387A1
; GENERAL INFORMATION:
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CURRENT APPLICATION NUMBER: US/10/733,311
CURRENT FILING DATE: 2003-12-12
PRIOR APPLICATION NUMBER: US/09/610,651
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: PCT/US95/01790
PRIOR FILING DATE: 1995-02-14
PRIOR APPLICATION NUMBER: 08/461,195
PRIOR PILING DATE: 1995-06-05
PRIOR FILING DATE: 1995-06-05
PRIOR PILING DATE: 1996-08-13
PRIOR APPLICATION NUMBER: 08/462,432
PRIOR FILING DATE: 1997-05-23
PRIOR FILING DATE: 1997-05-23
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Best Local :
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APPLICANT:
APPLICANT:
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FILE REFERENCE: 1488.0360000
CURRENT PELLICATION NUMBER: US/10/035,212
CURRENT FILING DATE: 2002-01-04
FRIOR APPLICATION NUMBER: 60/259,853
PRIOR PILING DATE: 2001-01-05
PRIOR PILING DATE: 2001-04-26
PRIOR FILING DATE: 2001-04-26
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PRIOR FILING DATE: 2001-11-09
NUMBER OF SEQ ID NOS: 176
                                                                                                                                                                                                                                                              APPLICANT: Coleman, Timothy A.
APPLICANT: Gruber, Joachim R.
APPLICANT: Dillon, Patrick J.
APPLICANT: Gentz, Reiner L.
TITLE OF INVENTION: Keratinocyte Growth Factor-2
FILE REFERENCE: 1488.0360000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ruben, Steven M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 88.4%; Score 237; DB 4; Length 268; Local Similarity 100.0%; Pred. No. 4.8e-210; 10els 237; Conservative 0; Mismatches 0; Indels
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Gentz, Reiner L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rampy, Mark A.
Mendrick, Donna
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Duan, D. Roxanne
                                                                                                                                                                                                                                                                                                                                                                                                       Moore, Paul A.
                                                                                                                                                                                                                                                                                                                                                                                                                           Zhang, Jun
Ni, Jian
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; ORGANISM: Homo
US-10-733-311-15
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                                                                                                                                                            Best Local Sin
Matches 237;
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Best Local Similarity
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                                                                                                                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                   FILE REPERENCE: 28967/39359A
CURRENT APPLICATION NUMBER: US/10/868,577A
CURRENT FILING DATE: 2004-06-14
PRIOR APPLICATION NUMBER: US 60/478,390
PRIOR FILING DATE: 2003-06-12
PRIOR APPLICATION NUMBER: US 10/669,176
PRIOR FILING DATE: 2003-09-23
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PRIOR FILING DATE: 1998-02-13
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 176
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PRIOR APPLICATION NUMBER: 60/055,561
PRIOR FILING DATE: 1997-08-13
PRIOR APPLICATION NUMBER: 08/910,875
PRIOR FILING DATE: 1997-08-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Alitalo et al.
TITLE OF INVENTION: HEPARIN BINDING VEGFR-3
                                                                                                                                                                                                                                                               LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
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                     SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV 120
                                                                                                    MSLSFILLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
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                                                                               MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
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                                                                                                                                                          88.4%; Score 237; DB 5; Lo
100.0%; Pred. No. 4.8e-210;
tive 0; Mismatches 0;
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APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Lawrence, David A.
APPLICANT: Roy, Margaret Ann
TITLE OF INVENTION: Fibroblast Growth Factor
FILE REFERENCE: P1219R1(e)
CURRENT APPLICATION NUMBER: US/09/284,663A
CURRENT FILING DATE: 1999-04-15
NUMBER OF SEQ ID NOS: 30
SEQ ID NO 10
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US-09-284-663A-10
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PRIOR FILLING DATE: 2002-01-04
PRIOR PELICATION NUMBER: 60/259,853
PRIOR FILLING DATE: 2001-01-08
PRIOR PELICATION NUMBER: 60/286,368
PRIOR APPLICATION NUMBER: 60/286,368
PRIOR APPLICATION NUMBER: 60/331,168
PRIOR PELICATION NUMBER: 60/331,168
PRIOR PELICATION NUMBER: 60/331,168
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PRIOR PELICATION NUMBER: 60/31,168
PRIOR PELICATION NUMBER: 60/31,168
PRIOR PELICATION NUMBER: 60/31,168
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Publication No. US20050037966A1
GENERAL INFORMATION:
APPLICANT: Ruben et al.
TITLE OF INVENTION: Keratinocyte Growth Factor-2
FILE REFERENCE: PF155P2D1
CURRENT APPLICATION NUMBER: US/10/901,210
CURRENT FILING DATE: 2004-07-29
                                                                                                                                                                                                                                             Sequence 10, Application US/09284663A
Patent No. US20020012961A1
GENERAL INFORMATION:
APPLICANT: Botstein, David A.
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Best Local Similarity
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SEQ ID NO 15
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                                                                                                            Botstein, David A.
Goddard, Audrey
Gurney, Austin L.
Hillan, Kenneth J.
Lawrence, David A.
Roy, Margaret Ann
VENTION: Fibroblast Growth Factor-19
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100.0%; Pred. No. 4.8e-210;
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SOPTWARE: PASTSEQ for Wi
SEQ ID NO 11
LENGTH: 268
TYPE: PRT
ORGANISM: Homo sapiens
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US-09-750-963-11
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                                                                                                                                                                                                                                                               Matches 195;
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                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/750,963
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/173,578
PRIOR FILING DATE: 1999-12-29
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Conklin, Darrell C.
TITLE OF INVENTION: NOVEL FGF HOMOLOG ZFGF10
FILE REFERENCE: 99-83
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TYPE: PRT
ORGANISM: Homo :
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                                                                                      RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
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 EQPELSFTVTVPEKK
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; Pred. No. 2.7e-171;
0; Mismatches 0;
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; Pred. No. 2.7e-171;
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RESULT 9
US-09-902-773A-7
; Sequence 7, Application US/09902773A
; Patent No. US20020034787A1
; GENERAL INFORMATION:

APPLICANT: HU,

JING-SHAN

FIBROBLAST GROWTH FACTOR-10

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MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-902-773A-7
                                                                                                                                                                                                                  US-09-251-263-12
                                                                                                                                                                                                                                        RESULT 10
GENERAL INFORMATION:
APPLICANT: Nathans, Jeremy
APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jennifer P.
APPLICANT: Macke, Jennifer P.
TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR HOMOLOGOUS
TITLE OF INVENTION: FACTOR-1 (FHF-1) AND METHODS OF USE
FILE REFERENCE: 07265/047003
CURRENT APPLICATION NUMBER: US/09/251,263
CURRENT FILING DATE: 1999-02-16
                                                                                                                                                                             Sequence 12, Application US/09251263 Patent No. US20020052477A1
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Best Local Similarity
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APPLICATION NUMBER: US/09/902,773A
FILING DATE: 12-Jul-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/803,926
FILING DATE: 21-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & STREET: 1100 NEW YORK AVENUE, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 268 amino acids
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US-10-081-347-33
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EARLIER FILING DATE: 1997-06-02
EARLIER APPLICATION NUMBER: 09/439,725
EARLIER FILING DATE: 1995-05-12
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 268
TYPE: DET
                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US/09/229,947
PRIOR FILING DATE: 1999-01-13
NUMBER OF SEQ ID NOS: 43
SOPTWARE: PASTSEQ for Windows Version 3.0
SEQ ID NO 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 33, Application US/10081347
Publication No. US20030008351A1
GENERAL INFORMATION:
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Best Local Similarity 100.0%; F
Matches 195; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/081,347
CURRENT FILING DATE: 2002-02-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: NOVEL FGF HOMOLOGS FILE REFERENCE: 96-20C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                               Local Similarity
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RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRPKQS
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Sheppard, Paul O.
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                                                                                                                                                                                                                               72.8%; Score 195; DB 4; Le 100.0%; Pred. No. 2.7e-171;
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; Pred. No. 2.7e-171;
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OTHER INFORMATION:
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SEQUENCE DESCRIPTION: SE
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                                                                                                                                                                                                                                                                                                                                                                                                         Matches 195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PATENTIN Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/189,360
FILING DATE: 02-011-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 39,317
REFERENCE/DOCKET NUMBER: 760100.415C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEPAX: (206) 682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION: NAME: No. US20030143217Altenburg Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/718,904
FILING DATE: 24-SEP-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chandler, Lois Ann
Sosnowski, Barbara A.
TITLE OF INVENTION: COMPOSITIONS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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     223
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                                                                                                                                                                                                                                                                                                                            43 GSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ 102
                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                            RERPQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRPKQS
  EQPELSFTVTVPEKK 237
                                                                                                                                                                            IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                                                                                                                                                            IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF 162
                                                                                                                                                                                                                                                                                        GSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: SEED and BERRY LLP STREET: 6300 Columbia Center,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 98104-7092
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                                                                                                                                                                                                                                                                                                                                                                                                                                    72.8%; Score 195; DB 4; L
100.0%; Pred. No. 2.7e-171;
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SEQ ID NO: 14:
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                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            701 Fifth Avenue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 268;
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                                                                                                                                Sequence 33, Application US/10315431

Publication No. US20030199443A1

APPLICANT: Bllsworth, Jeff L.

APPLICANT: Bllsworth, Theresa A.

APPLICANT: Hoghes, Steven D.

APPLICANT: Hoghes, S
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US-10-192-988-8
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US-10-315-431-33
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SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 268
TYPE: PRT
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Best Local Similarity 100.0%; I
Matches 195; Conservative 0;
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SEQ ID NO 8
LENGTH: 268
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TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR HOMOLOGOUS FACTOR-2 AND METHODS
FILE REFERENCE: JUMILIZATE.
CURRENT APPLICATION NUMBER: US/10/192,988
CURRENT FILING DATE: 2002-07-10
PRIOR APPLICATION NUMBER: US 09/261,007
PRIOR FILING DATE: 1999-03-02
PRIOR FILING DATE: 1999-03-02
PRIOR APPLICATION NUMBER: US 08/438,439
PRIOR APPLICATION NUMBER: US 08/438,439
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 199
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                                                                                                                    NUMBER OF SEQ ID NOS: 43
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; Pred. No. 2.7e-171;
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Length 268, Indels

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Gaps

0

102

222

162

222

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CURRENT APPLICATION NUMBER: US/10/347,177
CURRENT FILING DATE: 2003-01-16
PRIOR APPLICATION NUMBER: US 09/251,263
PRIOR FILING DATE: 1999-02-16
PRIOR FILING DATE: 1999-02-16
PRIOR FILING DATE: 1997-06-02
PRIOR APPLICATION NUMBER: US 08/439,725
PRIOR APPLICATION NUMBER: US 08/439,725
PRIOR PILING DATE: 1995-05-12
NUMBER OF SEQ.ID NOS: 14
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ.ID NO 11
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US-10-347-177-11
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-347-177-11
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Publication No. US20030220483A1

GENERAL INFORMATION:

APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
APPLICANT: Nathans, Jeremy
                                                                                                                                                                                                                                                                                                                               Query Match 72.8%; Score 195; DB 4; Length 268; Best Local Similarity 100.0%; Pred. No. 2.7e-171; Matches 195; Conservative 0; Mismatches 0; Indels
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APPLICANT: Smallwood, Philip M.
APPLICANT: Macke, Jennifer P.
APPLICANT: Macke, Jennifer P.
TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR HOMOLOGOUS FACTOR-1 (FHF-1) AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: JHU1240-3
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223
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                                                                                                                                                                                       | TYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF 162
                                                                                                       RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
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                            EQPELSFTVTVPEKK 237
                                                                                 RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
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237
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Search completed: April 11, 2006, 03:45:45

Job time : 60.5 secs



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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Perfect score:
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Published Applications AA New:*

1: /SIDSS/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

2: /SIDSS/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /SIDSS/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

4: /SIDSS/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*

5: /SIDSS/ptodata/2/pubpaa/US09_NEW_PUB.pep:*

6: /SIDSS/ptodata/2/pubpaa/US10_NEW_PUB.pep:*

7: /SIDSS/ptodata/2/pubpaa/US11_NEW_PUB.pep:*

8: /SIDSS/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

25 25 26 27 27 27 27 27 27 27 27 27 27 27 27	Result No.
2268 11956 11956 11782 11782 11793 11794 1	Score
100.00 100.00 172.88 772.88 67.98 65.7 56.3 119.4 119.4 3.7 3.7 3.7 3.7 3.7 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Query Match
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Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	sequence
18593, A	11, Appl	873, App	17455, A	22, Appl	21, Appl	12758, A	7838, Ap	4, Appli	2378, Ap	13393, A	22, Appl	2629, Ap	7612, Ap	3422, Ap	138, App	34, Appl	61, Appl	59, Appl	ddw 'zac

ALIGNMENTS

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APPLICANT: HANAGA et al.

APPLICANT: HANAGA et al.

TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)

FILE REPERENCE: 67015-05

CURRENT APPLICATION NUMBER: US/11/134,703

CURRENT FILING DATE: 2005-05-19

PRIOR APPLICATION NUMBER: PCT/US2003/37065

PRIOR FILING DATE: 2003-11-19

PRIOR PILING DATE: 2002-11-19

PRIOR APPLICATION NUMBER: US 60/427,920

PRIOR RILING DATE: 2002-11-19

PRIOR APPLICATION NUMBER: US 10/089,485

PRIOR APPLICATION NUMBER: US 10/089,485

PRIOR APPLICATION NUMBER: PCT/US00/26689

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 1999-10-02

NUMBER OF SEQ ID NOS: 43

SOFTWARE: PATENTIN VET: 3.3

SOFTWARE: PATENTIN VET: 3.3

LENGTH: 268

TYPE: PRT
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US-11-134-703-18
; Sequence 18, Application US/11134703
; Publication No. US20060009393A1
; GENERAL INFORMATION:
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Best Local S
Matches 268
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                           TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKKPP 240
                                                                                                               LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR 180
                                                                                                                                                                                                     SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
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  TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSPTVTVPEKKKPP
                                                                                   LBIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRBRFQENSYNTYASAIHR
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RESULT 3
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US-11-134-703-12
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PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR PILING DATE: 2002-11-19
PRIOR PILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR FILING DATE: 2002-03-27
PRIOR PILING DATE: 2000-09-29
PRIOR PILING DATE: 2000-09-29
PRIOR PILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
PORTUNE SEQ ID NOS: 43
PORTUNE SEQ ID NOS: 43
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SEQ ID NO 12
LENGTH: 246
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Best Local Similarity
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            APPLICANT: Hanada et al.

TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)
FILE REFERENCE: 67015-05
CURRENT APPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR FILING DATE: 2002-11-19
PRIOR FILING DATE: 2002-11-19
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CURRENT FILING DATE: 2005-05-19
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TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5
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APPLICATION NUMBER: US 10/089,485
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100.0%; Pred. No. 3.7e-225;
ative 0; Mismatches 0;
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CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR PHILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR FILING DATE: 1999-10-02
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US-11-134-703-4
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SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Hanada et al
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                                                                                                                                                                    Query Match 72.8%; Score 195; DB 7; Louis Local Similarity 100.0%; Pred. No. 7.2e-177; Matches 195; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4, Application US/11134703 Publication No. US20060009393A1
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PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR FILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5) FILE REFERENCE: 67015-05
                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 43
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TYPE: PRT
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TYPE: PRT
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                      IYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF 162
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                                                                                    GSSSROSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
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  IYPDGKVNGSHEANMLSVLBIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
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RESULT 5
US-11-238-936-9
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PRIOR FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 15
SOPTWARE: PATENTIN VEY: 2.0
SEQ ID NO 9
LENGTH: 266
                                                                                                                                                                                                                                                                                                Sequence 8, Application US/11134703 Publication No. US20060009393A1 GENERAL INFORMATION:
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APPLICANT: Hanada et al.

TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)

FILE REFERENCE: 67015-05

CURRENT APPLICATION NUMBER: US/11/134,703

CURRENT FILING DATE: 2005-05-19

PRIOR APPLICATION NUMBER: ECT/US2003/37065

PRIOR FILING DATE: 2003-11-19

PRIOR APPLICATION NUMBER: US 60/427,920

PRIOR APPLICATION NUMBER: US 10/089,485

PRIOR FILING DATE: 2002-01-27

PRIOR APPLICATION NUMBER: US 72/US00/26689

PRIOR APPLICATION NUMBER: PCT/US00/26689

PRIOR FILING DATE: 2000-09-29
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Best Local Similarity
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APPLICANT: Kavanaugh, Michael W.
TITLE OF INVENTION: Angiogenically Effective Unit Dose of FGF
TITLE OF INVENTION: Administering
FILE REFERENCE: 1296/12169US05
CURRENT APPLICATION NUMBER: US/11/238,936
CURRENT FILING DATE: 2005-09-29
CURRENT FILING DATE: 2005-09-29
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ORGANISM: Human FGF-5
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RESULT 8 US-11-134-703-6

Sequence 6, Application US/11134703 Publication No. US20060009393A1 GENERAL INFORMATION:

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Sequence 15, Application US/11238936

Publication No. US20060025343A1

Publication No. US20060025343A1

APPLICANT: Whitehouse, Martha J.

APPLICANT: Kavanaugh, Michael W.

TITLE OF INVENTION: Amgiogenically Effective Uni

TITLE OF INVENTION: Administering

FILE REFERENCE: 1296/12169US05

CURRENT APPLICATION NUMBER: US/11/238,936

CURRENT FILING DATE: 2005-09-29

PRIOR APPLICATION NUMBER: US/09/417,721

PRIOR APPLICATION NUMBER: US/09/417,721

PRIOR APPLICATION NUMBER: 60/104,103

PRIOR FILING DATE: 1999-10-13

PRIOR FILING DATE: 1998-10-13

PRIOR PILING DATE: 1998-10-13
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; TYPE: PRT
; ORGANISM: Human PGP-5
US-11-238-936-15
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Matches 176
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Best Local Similarity 100.
Conservative
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LENGTH: 176
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PRIOR FILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 3.3
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                              KPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237
                                                                                                                                KGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRV 206
                                                                                                                                                                                                                                           RTGSLYCRVGIGFHLQIYPDGKVNGSHEANWLSVLBIFAVSQGIVGIRGVFSNKFLAMSK 146
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                                                                                                     KGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRV
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KPOHISTHFLPRFKOSEOPELSFTVTVPEKK 235
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100.0%; Pred. No. 4.6e-159;
ative 0; Mismatches 0;
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CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR APPLICATION NUMBER: PCT/US00/26689
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                                                                                                        ; ORGANISM: Homo sapiens
US-11-134-703-19
                                                                                                                                                                       SOFTWARE: PatentIn Ver. 3.3
SEQ ID NO 19
LENGTH: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19, Application US/11134703 Publication No. US20060009393A1 GENERAL INFORMATION:
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PRIOR FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR PILING DATE: 2002-03-27
PRIOR PILING DATE: 2002-03-27
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CURRENT APPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5
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TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)
                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/157,103 PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: 67015-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Hanada et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1999-10-02
                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 176
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                                                                                                                                                                                                                                                                                                      FILING DATE: 2000-09-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               213 THFLPRFKQSEQPELSFTVTVPEKK 237
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               153 SAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHIS 212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHIS
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               22.4%; Score 60; DB ilarity 100.0%; Pred. No. 9.8 Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54.1%; Score 145; DB 7; L
100.0%; Pred. No. 9.9e-130;
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           DB 7; L-
o. 9.8e-50;
0;
                                                         Length 60;
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                      Indels
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                 Gaps
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161 KFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFK 220

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; OTHER INFORMATION: Variant peptide sequence. US-11-134-703-38
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SEQ ID NO 37
LENGTH: 52
TYPE: PRT
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Publication No. US20060009393A1
GENERAL INFORMATION:
                                                                                                                                                SOFTWARE: PatentIn Ver. 3.3
SEQ ID NO 38
LENGTH: 49
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Best Local Similarity
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                                                                                                                                                                                                                                                                APPLICANT: Hanada et al.
TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)
FILE REFERENCE: 67015-05
CURRENT APPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR APPLICATION NUMBER: US 10/089,485
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CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR FILING DATE: 2002-11-19
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PRIOR FILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR APPLICATION NUMBER: 60/157,103
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NUMBER OF SEQ ID NOS: 43
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TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)
                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PEATURE: OTHER INFORMATION: Variant peptide sequence.
                                                                                      ORGANISM: Artificial Sequence
                                                                                                                         TYPE: PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence
                                                         FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52;
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100.0%; Pred. No. 3.2e-42;
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PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR FILING DATE: 2002-11-19
PRIOR FILING DATE: 2002-11-19
PRIOR PILING DATE: 2002-01-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR APPLICATION NUMBER: 60/157,103
PRIOR FILING DATE: 2000-09-29
PRIOR PILING DATE: 1999-10-02
NUMBER OF SEQ ID NOS: 43
SOPTWARE: PATENTIN Ver. 3.3
SEQ ID NO 32
LENGTH: 10
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CURRENT FILING DATE: 2005-05-19
PRIOR APPLICATION NUMBER: PCT/US2003/37065
PRIOR FILING DATE: 2003-11-19
PRIOR APPLICATION NUMBER: US 60/427,920
PRIOR FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US 10/089,485
PRIOR PILING DATE: 2002-03-27
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR APPLICATION NUMBER: PCT/US00/26689
PRIOR PILING DATE: 2000-09-29
PRIOR PILING DATE: 2000-09-29
PRIOR PILING DATE: 2000-09-29
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Best Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                          APPLICANT: Hanada et al.
TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5 (FGF-5)
FILE REFERENCE: 67015-05
CURRENT APPLICATION NUMBER: US/11/134,703
CURRENT FILING DATE: 2005-05-19
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TITLE OF INVENTION: IMMUNOGENIC EPITOPES FOR FIBROBLAST GROWTH FACTOR 5
FILE REFERENCE: 67015-05
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NUMBER OF SEQ ID NOS: 43
SOFTWARE: PatentIn Ver. 3.3
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ilarity 100.0%; Pred. No. 1.8e-38;
Conservative 0; Mismatches 0;
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Pred. No.
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US-11-096-568A-20771
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US-11-087-099-8568
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US-11-134-703-32
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                                                                Query Match
Best Local S
Matches 9
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Matches
                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 34471
SEQ ID NO 20771
LENGTH: 413
TYPE: PRI
ORGANISM: Zea mays subsp. mays
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APPLICANT: Alexandrov, Nickolai et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Abad, Mark S. et al.
TITLE OF INVENTION: Genes and Uses for Plant
FILE REFERENCE: 38-21(53450)B EP
CURRENT APPLICATION NUMBER: US/11/087,099
CURRENT FILING DATE: 2005-03-22
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SEQ ID NO 8568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.4%; Score 9; DB 7; Best Local Similarity 100.0%; Pred. No. 0.49; Matches 9; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/11/096,568A CURRENT FILING DATE: 2005-04-01
                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Sequence-Determined TITLE OF INVENTION: Therby
                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 2750-1592PUS2
                                                                                                                                              PEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(413)
OTHER INFORMATION: Ceres Seq. ID no. 12387083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
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3.7%; Score 10; DB 7;
Local Similarity 100.0%; Pred. No. 0.0039;
hes 10; Conservative 0; Mismatches (
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243
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                                  55 SSSSASSSP
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251
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Mismatches
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Search completed: April 11, Job time : 10.5 secs

2006, 03:46:10

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 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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seq length: 2000000000
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Gapop 60.0 , Gapext 60.0
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D QY	. & B &	C;Superfal C;Keyword C;Keyword Query M Best Lo Matches	A; Molecule A; Residues: A; Cross-ref C; Genet GCS: A; Gross-ref A; Gross-ref A; Map posit	R; Zhan, Mol. Ce A; Title A; Refer	RESULT 1 TVHUF5 fibroblast (N;Alternate C;Species: 1 C;Date: 31-1		C C C C C C C C C C C C C C C C C C C
146 KGKLHASAKFTDDCKFRERFQENSYNTYASAIHKTEKTGREWYVALNKRGKAKRGCSPRV 207 KPQHISTHFLPRFKQSEQPELSFTVTVPEKK 237		mily: fibroblast growth factor s: growth factor; transforming prot atch 56.3%; Score 151; cal Similarity 100.0%; Pred. No. 151; Conservative 0; Mismatcl	Type: mRNA 1-267 <zha> serences: UNIPROT:P12034; props erences: GDB:119907; OMIM ion: 4021-4021</zha>	R;Zhan, X; Bates, B; Hu, X; Goldfarb, M. R;Zhan, X; Bates, B; Hu, X; Goldfarb, M. Mol. Cell. Biol. 8, 3487-3495, 1988 A;Title: The human FGF-5 oncogene encodes a novel protein A;Reference number: A31194; MUID:89096942; PMID:3211147 A.Accession. A31194	<pre>growth factor 5 - human names: transforming proteir domo sapiens (man) boc-1999 #sequence_revision . halloa</pre>	ALIGNMENTS	8 3.0 431 2 T12450 8 3.0 475 2 A88712 8 3.0 476 2 S66713 8 3.0 484 2 S66713 8 3.0 490 2 A32140 8 3.0 600 2 S07638 8 3.0 600 2 S07638 8 3.0 640 1 QQBEU2 8 3.0 640 2 S02747 8 3.0 641 2 T16597 8 3.0 641 2 T16597 8 3.0 717 2 T25431 8 3.0 717 2 T25431 8 3.0 774 2 T48694 8 3.0 775 1 EDBE11 8 3.0 775 1 EDBEXD
AIHRTEKIGREWYVALNKKGKAKRGCSPRV 205 k 237 k 236		ein DB 1; Length 267; 5.3e-139; hes 0; Indels 0; Gaps 0;	UNIPARC:UPI00000462BB; GB:M23536; GB:M21617; NID:glE	novel protein related to fibroblast growth t MID:3211147	1 FGF5 31-Dec-1989 #text_change 09-Jul-2004	īS	hypothetical prote protein C17H12.9 { hypothetical prote hypothetical prote hypothetical prote steroid 15beta-mon glycophospholipid-spore coat protein UL35 protein - hum homeotic protein A hypothetical prote hypothetical prote probable transcription fact transcription fact transcription fact immediate-early primmediate-early primm

RESULT 2
A36207
fibroblast growth factor 5 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 28-Mar-1991 #sequence_revision 28-Mar-1991 #text_change 09-Jul-2004
C;Accession: A36207; B37360
R;Haub, O.; Drucker, B.; Goldfarb, M.
Proc. Natl. Acad. Sci. U.S.A. 87, 8022-8026, 1990
A;Title: Expression of the murine fibroblast growth factor 5 gene in the adu A;Reference number: A36207; MUID:91045929; PMID:1700424
A;Accession: A36207
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: DNA

in the adult central

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A;Status: preliminary; nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-121 cHAT>
A;Cross-references: UNIPROT:P48807; UNIPARC:UPI000002A98F; EMBL:D64086; NID:g987689;
C;Keywords: alternative splicing
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S68144
                                                                                                             RESULT 4
$68145

C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Dec-1996 #sequence_revision 13-Mar-1997 #text_chan
Richter 1, Y:; Yamasaki, M.; Itoh, N.
Biochim. Biophys. Acts 1306, 31-33, 1996
Biochim. Biophys. Acts 1306, 31-33, 1996
A;Title: The rat FGF-5 mRNA variant generated by alternative
A;Reference number: $68145
A;Accession: $68145
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R;Hattori, Y:; Yamasaki, M.; Itoh, N.
Biochim. Biophys. Acta 1306, 31-33, 1996
A;Title: The rat FGF-5 mRNA variant generated by alternative A;Reference number: S68144; MUID:96201703; PMID:8611621
A;Accession: S68144
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 06-Dec-1996 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
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A;Residues: 1-264 <HAUV
A;Cross-references: UNIPROT:P15656; UNIPARC:UPI0000003F7B; GB:M37821; GB:M37822; GB:M378
R;Hebert, J.M.; Basilico, C.; Goldfarb, M.; Haub, O.; Martin, G.R.
Dev. Biol. 138, 454-463, 1990
A;Title: Isolation of cDNAs encoding four mouse FGF family members and characterization A;Reference number: A37360; MUID:90201563; PMID:2318343
A;Accession: B37360
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A; Residues: 1-266 < HAT>
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Best Local S
Matches 90
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RESULT

7

hypothetical protein A_TM018A10.23 -

Arabidopsis thaliana

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RESULT 5
S69307
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A;Accession: T22906
A;Status: preliminary; translated from
A;Molecule type: DNA
A;Residues: 1-143 <WILL>
                                                                                                                                                                                                                                                                                                                                            hypothetical protein F58D12.1 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: Coct.1999 #sequence_revision 15-Oct-1999 #text_change C;Accession: T22906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Keywords: transmembrane protein F;77-93/Domain: transmembrane #status predicted
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C;Superfamily: Saccharomyces probable membrane protein YLR294c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             submitted to the EMBL Data Library, November A;Description: The sequence of S. cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Saccharomyces cerevisiae
C;Date: 20-Jul-1996 #sequence_revision 23-Aug-1996 #text_change 09-Jul-2004
C;Accession: S69307
R;Pauley, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             probable membrane protein YLR294c - yeast (Saccharomyces
N;Alternate names: hypothetical protein L8003.19-a
                                                                                                                                                                                                                                                                                            submitted to the EMBL Data Library, A;Reference number: Z19635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-109 < PAU:
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A; Accession: 869307
F
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                                                                                                                              A; Introns: 14/1; 38/2; 75/1;
                                                                                                                                                                                              A;Cross-references: UNIPROT:002276; UNIPARC:UPI00000753E8; EMBL:Z81092; PIDN:CAB03144.1;
A;Experimental source: clone F58D12
                                                                                                                                                                                                                                                                                                                                                                                                               T22906
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Best Local S
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les 9; Conserv
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61
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Pred. No.
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Pred. No.
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C;Accession: S04741; A37360
R;Brookes, S.; Smith, R.; Thurlow, J.; Dickson, C.; Peters, G.
Nucleic Acids Res. 17, 4037-4045, 1989
A;Title: The mouse homologue of hst/k-FGF: sequence, genome organization
A;Reference number: S04741; MUID:89296455; PMID:2740210
A;Accession: S04741
                                                                                                                                                                                                         fibroblast growth factor 4 - mouse
N;Alternate names: transforming protein hstfl; transforming protein k-FGF; transforming c;Species: Mus musculus (house mouse)
C;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 09-Jul-2004
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N;Alternate names: hypothetical protein 06760
C;Species: Saccharomyces cerevisiae
C;Date: 12-Jul-1996 #sequence_revision 12-Jul-1996 #text_change 09-Jul-2004
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A;Residues: 1-202 <BRO>
A;Residues: 1-202 <BRO>
A;Cross-references: UNIPROT:P11403; UNIPARC:UPI0000027966; GB:X14849; R;Hebert, J.M.; Basilico, C.; Goldfarb, M.; Haub, O.; Martin, G.R.
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A; Introns: 466/3; 569/3; 649/3; 688/1; 740/3; 877/3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Reference number: Z14348
A; Accession: T01566
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A;Experimental source: strain S288C
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A; Accession: S67294
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                                                                           A; Molecule type: DNA
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;Date: 19-Feb-1999 #sequence_revision 19-Feb-1999 #text_change
;Accession: T01566
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A;Molecule type: DNA
A;Residues: 1-206 <70S>
A;Residues: 1-206 <70S>
A;Residues: 1-206 <70S>
A;Residues: 1-206 <70S>
A;Residues: DDBJ:J02986; NID:g184430; PIE
A;Cross-references: UNIPROT:P08620; UNIPARC:UPI0000040662; DDBJ:J02986; NID:g184430; PIE
B;Taira, M.; Yoshida, T.; Miyagawa, K.; Sakamoto, H.; Terada, M.; Sugimura, T.
Proc. Natl. Acad. Sci. U.S.A. 84, 2980-2984, 1987
A;Title: cDNA sequence of human transforming gene hst and identification of the coding sla;Reference number: A29876; MUID:87204251; PMID:2953031
A;Reference number: A29876; MUID:87204251; PMID:2953031
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPARC:UPI0000040662; GB:J02986; GB:M16338; NID:g184430; PIDN:AAB59
R;Delli Bovi, P.; Curatola, A.M.; Kern, F.G.; Greco, A.; Ittmann, M.; Basilico, C.
Cell 50, 729-737, 1987
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A;Molecule type: mRNA
A;Residues: 1-166,'S',168-202 <HEB>
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C; Superfam:
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A;Map position: 11q13.3-11q13.3
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                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-206 <BOV>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cell 50, 729-737, 1987
A;Title: An oncogene isolated by transfection of Kaposi's A;Reference number: A29649; MUID:87301716; PMID:2957062
A;Accession: A29649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-206 < TAI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Superfamily: fibroblast growth factor
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A;Title: Isolation of cDNAs er
A;Reference number: A37360; Mt
A;Accession: A37360
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                                                                                                                                                                Map position: 114/1; 148/3; Introns: 114/1; 148/3; Superfamily: fibroblast growth factor; Superfamily: fibroblast growth factor; Kaposi sarcoma; transforming protein
                                                                                                                               Query Match
Best Local
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nes 8; Conservative (
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                                                                                                    Similarity
8; Conserv
                                                   VGIGFHLQ 102
VGIGFHLQ
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                                                                                                       Conservative
  97
                                                                                                 3.0%; Score 8;
100.0%; Pred. N
ntive 0; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         transforming
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
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; Pred. No.
                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
                                                                                                                          No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
o. 6.9;
                                                                                                                               DB 1;
5. 7;
                                                                                                                                                                                                                                                                                                                                                                                          GB:M17446; NID:g186785; Kaposi's sarcoma. It is
                                                                                                                                                        Length 206;
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                                                                                                       Indels
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                                                                                                       0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA encodes a growth
                                                                                                                                                                                                                                                                                                                                                                                       PIDN:AAA59473.1; I homologous to the
                                                                                                 Gaps
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A;Map position: 12p13-12p13
A;Introns: 115/3; 150/2
C;Superfamily: fibroblast growth factor
F;1-40/Domain: (or 11-40 or 34-40) signal sequence #status predicted
F;41-208/Product: fibroblast growth factor 6 #status predicted 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:P10767; UNIPARC:UPI00000411BF; EMBL:X57075
A;Note: it is uncertain whether Met-1, Met-11 or Met-34 is the initiator R;Ida, S.; Yoshida, T.; Naito, K.; Sakamoto, H.; Katoh, O.; Hirohashi, S.; Oncogene 7, 303-309, 1952
A;Title: Human hst-2 (PGF-6) oncogene: cDNA cloning and characterization.
A;Reference number: S23739; MUID:92195660; PMID:1549352
A;Accession: S23739
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C;Species: Bos primigenius taurus (cattle)
C;Date: 10-Nov-1995 #sequence_revision 08-Feb-1996 #text_change 17-Mar-2000
                                                                                                                                                                                                                                                                                                                       A;Residues: 1-208 cIID>
A;Cross-references: UNIPARC:UPI00000411BF; EMBL:X63454
A;Cross-references: UNIPARC:UPI00000411BF; EMBL:X63454
A;Note: it is uncertain whether Met-1 or Met-11 is the ir
R;Marics, I.; Adelaide, J.; Raybaud, F.; Mattei, M.G.; Cc
Oncogene 4, 335-340, 1989
A;Title: Characterization of the HST-related FGF.6 gene,
A;Reference number: S04204; MUID:89201880; PMID:2649847
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C;Superfamily: fibroblast growth factor
C;Keywords: thymus; transforming protein
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R;Yu, J.C.; DeSeabra, A.J.J.; Wang, L.M.; Fleming, T.P.;
                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 81-99, 'G', 101-208 < MAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: mRNA
A; Residues: 1-208 <III
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A; Residues: 1-208 < COU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Title: Putative structure of the FGF6 gene product and A; Reference number: S20102; MUID:91360279; PMID:1886714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Coulier, F.; Batoz, M.; Marics, I.; de Lapeyriere, Oncogene 6, 1437-1444, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fibroblast growth factor 6 precursor - human N_iAlternate names: fibroblast growth factor-related protein FGF.6; transforming protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: hst
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPARC:UPI0000176539; GB:U15969 A;Note: The authors translated the codon GGC for res
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gene 162, 333-334, 1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Accession: S20102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Reference number:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Date: 18-Feb-1994 #sequence revision 12-Apr-1996 #text_change 09-Jul-2004; Date: 18-Feb-1994 #sequence revision 12-Apr-1996 #text_change 09-Jul-2004; Accession: S20102; S23739; S04204; S36910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Comment: This protein
                                                                                                                                                                                                                     ;Cross-references: UNIPARC:UPI000016A8F6; EMBL:X14071; NID:g31354; PIDN:CAB37648.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;Species: Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genetics:
                                                                                                                                                                    Gene: GDB:FGF6; hst-2
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Best Local
                                                                                                                                        Cross-references:
                                                                                                                                                                                                                                                                                                       Accession: S04204
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                                                                                                                                     GDB:119908; OMIM:134921
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 206;
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                                                                                                                                                                                                                                                                                                                                                                                                         Coulier,
                                                                                                                                                                                                                                                                                                                                                                                                                                  initiator
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factor
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                                                                                                                                                                                                                                                                                                                                                     a new member of the
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family. The hstgene
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R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.; M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.B.; Umayam, L.; Tallon, L. euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J. Nature 402, 761-768, 1999

A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana A;Reference number: A84420; MUID:20083487; PMID:10617197 A;Accession: B84653

A; Cross-references: C; Genetics:

UNIPROT:082315; UNIPARC:UPI0000179899; GB:AE002093; NID:g3643601;

ΡI

A;Molecule type: DNA A;Residues: 1-225 <S

A, Status: preliminary

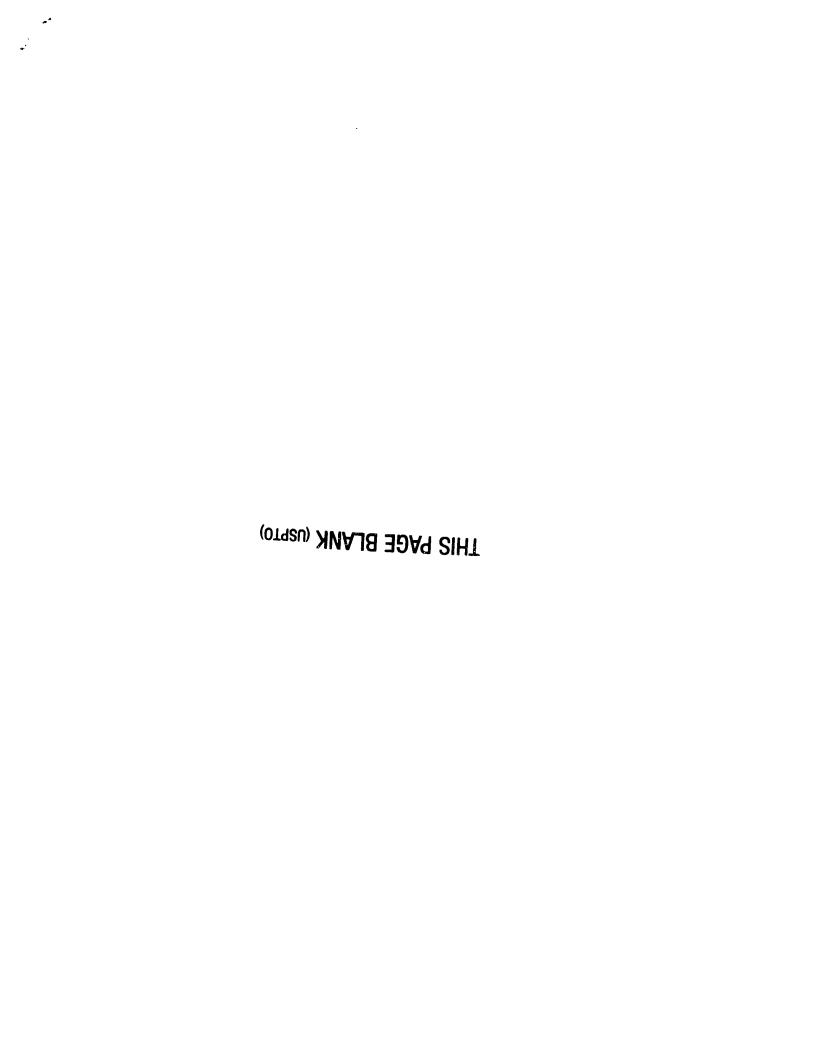
A; Gene: At2g25820 A; Map position: 2 TINY-like AP2 domain transcription factor [imported] - Arabidopsis thaliana (Species: Arabidopsis thaliana (mouse-ear cress) (2-Peb-2001 #sequence_revision 02-Peb-2001 #text_change 09-Jul-2004 (2-Peb-2001) #text_change 09-Jul-2004 (2-Peb-2001) #text_change 09-Jul-2004 (2-Peb-2001) #text_change 09-Jul-2004 (3-Peb-2001) #text_change 09-

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R;Ollendorff, V.; Rosnet, O.; Marics, I.; Birnbaum, D.; Biochimie 74, 1035-1038, 1992
A;Title: Isolation and sequence of the murine Fgf6 cDNA. A;Reference number: I49664; MUID:93120244; PMID:1477139
A;Accession: I49665
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S14192
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C;Species: Mus musculus (house mouse)
C;Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
C;Accession: S14192; I49665; I49664
R;de Lapeyriere, O.; Rosnet, O.; Benharroch, D.; Raybaud, F.; Marchetto, S.; Planche,
                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oncogene 5, 823-831, 1990
A;Title: Structure, chromosc
A;Reference number: S14192;
A;Accession: S14192
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닭
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C; Superfamily:
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A;Residues: 19-208 <RES>
A;Cross-references: UNIPARC:UPI000016CD51; GB:M92416; NID:g193288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:P21658; UNIPARC:UPI0000020A67; EMBL:X51552 A;Note: it is uncertain whether Met-1 or Met-11 is the initiator
                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-18 < RE2>
                                                                                                                                                                                                                                                                                       A; Accession: I49664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-208 < LAP
                                                                                                                                                                                                                                                                    A;Status: preliminary; translated
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Best Local S
Matches 8
                                                                                                                                                                            Gene: Fgf6
                                                                                                                                                                                                                Cross-references: UNIPARC:UPI000016CD50; GB:M92415; NID:g193286; PIDN:AAA62260.1;
                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                            Status: preliminary; translated from GB/EMBL/DDBJ
                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92
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92
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                                 VGIGFHLQ 102
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                                                                                                                                          fibroblast
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                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chromosome mapping and S14192; MUID: 90295275;
                                                                                        100.0%;
                                                                                                                                          growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                     O.; Marics, I.; Birnbaum, D.; deLapeyriere, O
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                                                                       0
                                                                                        Score 8; |
Pred. No.
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nuclear protein SR-25 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 09-Jun-2000 #sequence_revision 09-Jun-2000 #text_change 09-Jul-2004
C;Accession: JC7219
R;Sasahara, K.; Yamaoka, T.; Moritani, M.; Tanaka, M.; Iwahana, H.; Yoshimoto, K.; Miyag Biochem. Biophys. Res. Commun. 269, 444-450, 2000
A;Title: Molecular cloning and expression analysis of a putative nuclear protein, SR-25.
A;Reference number: JC7219; MUID:20175222; PMID:10708573
A;Accession: JC7219
A;Molecule type: mRNA
A;Residues: 1-229 <SAS>
A;Cross-references: UNIPROT:09JM93; UNIPARC:UPI00000231C4; DDBJ:AB035383; NID:g7619895;
A;Cross-references: UNIPROT:09JM93; UNIPARC:UPI00000231C4; DDBJ:AB035383; NID:g7619895;
A;Experimental source: MING cell line
C;Comment: This protein is a highly hydrophilic nuclear protein with a serine-arginine r
A splicing factors.
C;Keywords: nucleus; RNA processing
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JC7219
Search completed: April 11, 2006, 03:38:26 Job time : 13 secs
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Copyright (c) 1993 - 2006 Biocceleration Ltd
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Q6SK00_RABIT
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Q8WN07_CANFA
O13543_YEAST
Q79C1_GRYSA
Q54TY7_DICDI
Q79C1_GRYSA
Q54TY7_DICDI
Q9U36_DROME
Q8SZH3_DROME
Q8SZH3_DROME
Q8SZH3_DROME
Q851P2_GRYSA
O12276_CAEEL
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dicentrarch
scenopus lae
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mus musculu
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e update) ion update) ion update) ion update) te G.A., Bettinotti M.P., ttor-5 as an overexpressed is."; 0.1073/pnas.242603899; i.H., Derge J.G., Schnefer C.F., Bhatt N.K., I.I., Wang J., Hsieh F., Rubin G.M., Hong L., Casavant T.L., Scheetz T.E., Casavant T.L., Scheetz T.E., Casavant T.L., Scheetz T.E., Casavant T.L., Scheetz T.E., i., Carninci P., Prange C., Abramson R.D., Mullahy S.J., Malek J.A., Gunaratne P.H., a A.M., Gay L.J., Hulyk S.W., I. W., Gibbs R.A., i., Lu X., Gibbs R.A., i., Dickson M.C., Myers R.M., 1ska U., Smailus D.E., Marra M.A., marra M.A., than 15,000 full-length human 6903(2002).	Q780u9 neurospora Q4qbt7 leishmania Q8bsd5 mus musculu Q5vz18 homo sapien Q9zrh9 oryza sativ Q7tm16 mus musculu Q6z9d7 oryza sativ Q6z9d7 oryza sativ Q6z9d7 oryza sativ Q6z9d9 oryza sativ Q6dj90 xenopus tro Q6dj90 xenopus tro Q86ny8 drosophila Q8dav3 vibrio vuln Q7mj05 vibrio vuln

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01-OCT-1989 (Rel. 12, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation updat
Fibroblast growth factor 5 precursor (FGF-5
                                                                                                                                                           Proc. Natl. [2]
NUCLEOTIDE
                                                                                                                                                                                            TISSUE=Brain stem;
MEDLINE=91045929; PubMed=1700424;
Haub O., Drucker B., Goldfarb M.;
"Expression of the murine fibroblast
central nervous system.";
Proc. Natl. Acad. Sci. U.S.A. 87:8027
                                        NUCLEOTIDE SEQUENCE (ISOFORM LONG).
MEDLINE=89096942; PubMed=3211147;
Zhan X., Bates B., Hu X., Goldfarb
"The human FGF-5 oncogene encodes a
fibroblast growth factors.";
Mol. Cell. Biol. 8:3487-3495(1988).
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PRINTS; PR00262; IL1HBGF.
PRODOM; PD000831; IL1 HBGF;
SMART; SM00442; FGF; 1.
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GO; GO:000803; F:growth factor activity; IRA.
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; IL1 HBGF.
Pfam; PF00167; FGF; 1.
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Eukaryota; Metazoa; (
Mammalia; Eutheria; I
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NUCLEOTIDE
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BC074858; AAH74858.1;
BC074859; AAH74859.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPRGSSSRQSSSSAMSSSSAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKKPP
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SEQUENCE (ISOFORM SHORT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         268 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29551 MW;
                                                                                                                                                           (ISOFORM LONG).
                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata; Craniata; Vertebrata; Euteleostomi
Euarchontoglires; Primates; Catarrhini; Homi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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                                                                       encodes a
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Pred. No. 5e-253;
); Mismatches 0;
                                                                                                                                                                                                           87:8022-8026(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
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mRNA.
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                                                                                                                ≅
                                                                                          novel
                                                                                                                                                                                                                                                   growth factor 5
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(FGF-5)
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pfam; pro0167; FGF; 1.
prinvis; pr00263; HBGFFGF.
prinvis; pr00262; ILL1HBGF;
pr0Dom; pr000831; IL1 HBGF; 1.
smart; sm00442; FGF; 1.
pr0SITUS; p800247; HBGF FGF; 1.
Alternative splicing; Glycoprotein; Gr
Protto-oncogene; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUB=Unbilical artery;

MEDLINE=20379035; PubMed=10823842; DOI=10.1074/jbc.M910099199;

de Vries C.J.M., van Achterberg T.A.E., Horrevoets A.J.G.,

ten Cate J.W., Pannekoek H.;

"Differential display identification of 40 genes with altered
"Differential display identification of 40 genes with altered
expression in activated human smooth muscle cells. Local expre
  CONFLICT
CONFLICT
SEQUENCE
                                                                                COMPBIAS
COMPBIAS
CARBOHYD
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Imamura T.;
"An alternatively-spliced
translates into a partial
                                                                                                                                                                                                                                                                                        GO; GO:0005615; C:extracellular space; TAS. GO; GO:0008283; P:cell proliferation; TAS. GO; GO:0007267; P:cell sell signaling; TAS. GO; GO:0008843; P:fibroblast growth factor GO; GO:0007399; P:neurogenesis; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; M37825; AAB66463.1; -; mRNA.
EMBL; M23336; AAB66699.1; -; Genomic_DNA.
EMBL; M23334; AAB66699.1; JOINED; Genomic_DNA.
EMBL; M23535; AAB66699.1; JOINED; Genomic_DNA.
EMBL; M23535; AAB66699.1; ALT_SEQ; Genomic_DNA.
EMBL; M23534; AAB66098.1; ALT_SEQ; Genomic_DNA.
EMBL; M23534; AAB66098.1; -; mRNA.
EMBL; AB616517; BAA33738.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This Swiss-Prot entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the El the European Bioinformatics Institute. There are no rest
                                                                                                                                    CHAIN
                                                                                                                                                                                                                                                                                                                                                           MIM;
                                                                                                                                                                                                                                                                                                                                                                      HGNC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IsoId=p12034-2; Sequence=VSP 001518; VSP 001519; 1-1- SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J. Biol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ozawa K.,
                                                                                                                                                Proto-oncogene;
SIGNAL 1
                                                                                                                                                                                                                                                                InterPro; IPR002209; GF_heparin_bd.
InterPro; IPR002348; IL1_HBGF.
                                                                                                                                                                                                                                                                                                                                                                                    Ensembl;
                                                      VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                   HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                            PIR; A31194; TVHUF5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   removed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biol. Chem. 275:23939-239
FUNCTION: This oncogene
transform NIH 3T3 cells.
ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=Short; Synonyms=FGF-5S; IsoId=P12034-2; Sequence=VSP_001518,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Event=Alternative splicing; Named
                                                                                                                                                                                                                                                                                                                                                           165190;
                                                                                                                                                                                                                                                                                                                                                                                                   P08620; 1IJT
                                                                                                                                                                                                                                                                                                                                                                        HGNC:3683; FGF5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IsoId=P12034-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              long as its content is in no
                                                                                                                                                                                                                                                                                                                                                                                     ENSG00000138675;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Suzuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (JUL-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE (ISOFORM SHORT)
    268
                                                                                18
49
55
110
120
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                 42
83
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                                                                                268
52
62
110
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                                                                                                                                                                                                                                                                                                                                                                                     Homo
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    ¥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        smage,
N-linked (GlCNAC...) (
VLEI -> QVHR (in isoform /FTId=VSP 001518.

Missing (In isoform Shor /FTId=VSP 001519.

R -> LGA (in Ref. 1).

PSGR -> LGA (in Ref. 2).

M; 08F4268B26781E9D CRC64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
                                                                                                          Poly-Ser.
Poly-Ser.
                                                                                                                                    Fibroblast
                                                                                                                                                 Potential
                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expressed in neonatal brain. FGF-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tomooka Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               way modified and this
                                                                                                                                                                          Growth
                                                                                                                                                                                                                                                                                                         factor receptor signaling.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       is abundant
tagonist for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180forms=2
                                                                                                                                  growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Li A.,
                                                                                                                                                                          factor;
                                                                                 isoform
     CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ls. Local expression activation-specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in brain |
FGF-5 neu
                                                       Short)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yoneda
                                                                                                                                                                          Mitogen;
                                                                                               (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             restrictions on
                                                                                 Short).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       neurotrophic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a collaboration
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Similarity

88.4%;

Pred. No. 9

.9e-

Length

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QNNBGG HUMAN PRELIMINARY; PRT; 125 AA.

1D QSNBGG; HUMAN PRELIMINARY; PRT; 125 AA.

AC QSNBGG;
DT 01-CCT-2002 (TTEMBLIFE1 22, Last sequence update)
DT 01-MAR-2004 (TTEMBLIFE1 22, Last sequence update)
DT 01-MAR-2004 (TTEMBLIFE1 22, Last sequence update)
DT 01-MAR-2004 (TTEMBLIFE1 22, Last sequence update)
DE Hypochetical protein Ful33238.

OS Homo sepiens (Human).

OC Sukaryoca, Metazoa; Chordata; Craniata; Vertebrata; E (Maman).

OC Mammalia; Bütheria; Buarchontoglires; Primates; Catalogue Composition, Com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
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Best Local Simi
Matches 237;
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RESULT 4

Q6A549 HUMAN

Q6A549;

AC

Q6A549;

DT

25-OCT-2004 (TrEMBLrel. 28, Created)

DT

25-OCT-2004 (TrEMBLrel. 28, Last sequence update)

DE

Pibroblast growth factor 5 isoform s'.

OC Homo sapiens (Human).

OC Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; I

OC Mammalia; Butheria; Ewarchontoglires; Primates; Cata:

OC Homo.

OC Homo.

OC Homo.

OC Homo.

OC Homo.

OC Homo.

NCBI TaxID=9606;

RN

[1]

RP

NUCLEOTIDE SEQUENCE.

RA

Nakakuki T., Ueba T.;

RA

Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databa:

DR

EMBL; AF355187; AAQ15127.1; -; mENA.

DR

G0; G0:0008083; F:growth factor activity; IEA.

DR

DR

Ffam; PP00167; PGF; 1.

DR

PFam; PP00167; PGF; 1.

DR

SEQUENCE 129 AA; 13509 MW; 98C791EB4A754EA2 CRC6:
RESULT 5
FGF5 MOUSE
FGF5 MOUSE
ID FGF5 MOUSE
STANDARD;
PRT; 264
AC P15656; O88825;
DT 01-APR-1990 (Rel. 14, Created)
DT 01-APR-1990 (Rel. 14, Last sequence upda
DT 13-SEP-2005 (Rel. 48, Last annotation up
E Thoroblast growth factor 5 precursor (FG
GN Name=Fgf5; Synonyms=Fgf-5;
OS Mus musculus (Mouse).
OC Musmalia; Eucheria; Euarchontoglires; Gl
OC Muroidea; Muridae; Murinae; Mus.
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Best Local Similarity
Matches 125; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
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Submitted (FBB-2001) to the EMBL/GenBank/DDBJ
EMBL, AF355187; AAQ15127.1; -; mRNA.
GO; GO:0008083; F:growth factor activity; IEA.
InterPro; IPR002348; IL1_HBGF.
Pfam; PF00167; FGF; 1.
ProDom; PD000831; IL1_HBGF; 1.
SEQUENCE 129 AA; 13509 MM; 98C791EB4A754E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProDom; PD000831; IL1 HBGF;
SMART; SM00442; FGF; T.
PROSITE; PS00247; HBGF FGF;
SEQUENCE 125 AA; 14536 MV
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ProDom; PD000831; IL1_HB
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                                                                                                                                                                                                                                                                                                                                                               SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLS
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llarity 100.0%;
Conservative (
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                           Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Glires; Rodentia; Sciurogna
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W; EDBB5B1C85B6BBCE CRC64;
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(FGF-5)
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RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kiyosawa H.,
RA Nikaido I., Osato N., Salto R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Yagi K., Tomaru Y., Hasesgawa Y., Nogami A., Schonbach C., Gojobori T.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Gasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanal A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Kanal A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Kanal A., Kawaji H., Marchionni L., McKenzie L., Miki H.,
RA Maglabima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA Marala T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
RA Wilming L.G., Wynshaw-Boris A., Yanagi Sawa M., Yang I., Yang L.,
RA Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA Hara A., Hashirume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Miyazaki A., Sakai N., Waterston R., Lander E.S., Rogers J.,
RA Miney E., Havashizaki Y.,
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=99003286; PubMed=9786939; DOI=10.1074/jbc.273.44.29262; Ozawa K., Suzuki S., Asada M., Tomooka Y., Li A.J., Yoneda A., Komi A., Imamura T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=C57BL/6J; TISSUE=Skin;
MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "An alternatively spliced fibroblast growth factor (FGF)-5 mRNA is abundant in brain and translates into a partial agonist/antagonist FGF-5 neurotrophic activity.";
J. Biol. Chem. 273:29262-29271(1998).
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Hebert J.M., Basilico C., Goldfarb M., Haub O., Martin G.R.;

"Isolation of cDNAs encoding four mouse FGF family members and characterization of their expression patterns during embryogenesis.";
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                                                                                                                                                                                                                                                               STRAIN=C57BL/6J; TISSUE=Embryo;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                            Birney E., Hayashizaki Y.;
"Analysis of the mouse transcriptome 60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Proc. Natl. Acad. Sci. U.S.A. 87:8022-8026(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=91045929; PubMed=1700424;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] (ISOFORM LONG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Expression of the murine fibroblast growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEOTIDE SEQUENCE (ISOFORM LONG)
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Best Local Similarity
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EMBL; M37823; AAB02660.1; -; Genomic DNA.

EMBL; M37821; AAB02660.1; JOINED; Genomic DNA.

EMBL; M37822; AAB02660.1; JOINED; Genomic DNA.

EMBL; M37821; AAB02660.1; JOINED; Genomic DNA.

EMBL; M37821; AAB02659.1; ALT_SEQ; Genomic_DNA.

EMBL; M37821; BAB02659.1; -; mRNA.

EMBL; AB016516; BAA33737.1; -; mRNA.

EMBL; AK028694; BAC26179.1; -; mRNA.

EMBL; BC021227; AAH71227.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                Ensembl; ENSMUSUCCE:

MGI; MGI:95519; Fgf5:
GO; GO:0005615; C:extracellular space; TAS.
GO; GO:001001; P:glial cell differentiation;
Interpro; IPR002209; GF heparin_bd.
Thearpro; IPR002348; ILI_HBGF.
                                                                                                                                                                                                                                             COMPBIAS
CARBOHYD
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.B., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                          Alternative splicing; Glycoprotein; Growth factor; Mitogen; Proto-oncogene; Signal.
SIGNAL 1 17 Potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its the Buropean Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
                                                                                                                                                                                                                  VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR; A36207; A36207.
HSSP; P08620; 1IJT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY: Belongs to the heparin-binding growth factors family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IsoId=P15656-1; Sequence=Displayed;
Name=Short; Synonyms=FGF-5S;
IsoId=P15656-2; Sequence=VSP_001520, VSP_001521;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   c. Natl. Acad. Sci. U.
ALTERNATIVE PRODUCTS:
Event=Alternative spl
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PR00262; IL1HBGF.
                                                                                         LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                 TEKTGREWYVALNKRGKAKRGCSPRVKPQH
                                                            LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Helton E., Ketteman M., Madan A., I
., Madan A., Young A.C., Shevchenko
                                                                                                                                                                                   264 AA;
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118
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                                                                                                                                                                                N-linked (GlcNAc. . .) (Poter ILEI -> QIYG (in isoform Sho) /FTId=VSP 001520.
Missing (In isoform Short). /FTId=VSP 001521.
W; F6A9C8153EE923D1 CRC64;
                                                                                                                        0
                                                                                                                                      Score 90;
Pred. No.
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                                                                                                                                      DB 1; Lo
 208
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RESULT 6
FGF5_RAT
ID FGF5_RAT

STANDARD;

PRT;

266

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01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Fibroblast growth factor 5 precursor (FGF-5)
Name=Fgf5; Synonyms=Fgf-5;
Rattus norvegicus (Rat).

(HBGF-5)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Rattus.

NCBI_TaxID=10116;

NUCLEOTIDE SEQUENCE (ISOFORMS LONG AND SHORT)

MEDLINE=96201703; PubMed=8611621; DOI=10.1016/0167-4781(19)60001-1; Hattori Y., Yamasaki M., Itoh N.;

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Best Local S
Matches 90
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"The rat FGF-5 mRNA variant generated by alternative splicing encodes a novel truncated form of FGF-5",
Biochim. Biophys. Acta 1306:31-33(1996).
-i- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                    COMPBIAS CARBOHYD
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EMBL; D64086; BAA10967.1; -; mRNA.

PIR; S68144; S68144.

PIR; S68145; S68145.

HSSP; P08620; 11JT.

Ensembl; ENSRNOG00000022631; Rattus norvegicus.
                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                               PRINTS; PR00263; HBGPFGF.
PRINTS; PR00262; ILLHBGF.
ProDom; PD000831; ILL HBGF; 1.
SMART; SM00442; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                   VARSPLIC
                                                                                                                                                                                                                                                                                                          GO; GO:0008083; F:growth factor activity; :
GO; GO:0005163; F:nerve growth factor recep
GO; GO:0008283; P:cell proliferation; IDA.
InterPro; IPR002209; GF heparin_bd.
InterPro; IPR002348; ILI_HBGF.
Pfam; PF00167; FGF; 1.
                                                                                                                                                                                                                                          PROSITE; PS00247; HBGF_FGF; 1.
Alternative splicing; Glycoprotein; Growth factor; Mitogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        use as
                                                                                                                                                                          VARSPLIC
                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                 Proto-oncogene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY: Belongs to the heparin-binding growth factors family.
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Name=Short; Synonyms=FGF-5S;
IsoId=P48807-2; Sequence=VSP_001522, VSP_001523;
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                                    119
              181
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                                                                                           Similarity
                                                 LEI FAVSQGI VGI RGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENS YNTYASAI HR
TEKTGREWYVALNKRGKAKRGCSPRVKPQH
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N-linked (GlcNAc.
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                                                                                                                            95B0A0CA7C0A200C CRC64;
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3. 4.7e-79;
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                                                                                                                                                                                                                                                                                                                                                       receptor binding;
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                                                                                                     Length 266;
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RESULT 8
Q6XK01 RABIT
D COKK01 RABIT PRELIMINARY;
AC Q6XK01;
DT 05-JUL-2004 (TremBlrel. 27, Li
DT 05-JUL-2004 (TremBlrel. 27, Li
DT 05-JUL-2004 (TremBlrel. 27, Li
DE Pibroblast growth factor 5 (F
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Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Rharchontoglires; Glires; Lagomorpha; Leporidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cartright J.M.;

Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.

EMBL; AY074893; AAL82819.1; -; Genomic_DNA.

EMBL; AY074892; AAL82819.1; JOINED; Genomic_DNA.

HSSP; Q02195; 1QQK.

SMR; Q8SQ73; 163-223.
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Canis familiaris (Dog).
Canis familiaris (Dog).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QBSQ73 CANFA PRELIMINARY;
Q8SQ73;
01-JUN-2002 (TrEMBLrel. 2
                                                                                                                                        NON_TER
                                                                                                                                                                                                     Mulsant P., de Rochambeau H., Submitted (FEB-2003) to the El EMBL; AY230008; AAP55849.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Name=FGF5;
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PRINTS; PR00262; IL1HBGF.
ProDom; PD000831; IL1 HBGF; 1.
SMART; SM00442; FGF; 1.
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InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; ILI_HBGF.
Pfam; PF00167; PGF; 1.__
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01-JUN-2002 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
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153 AA; 17420 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE.
                                                                                                        99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                    99
9 AA;
                                                                                                        10074 MW;
   11.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22.4%; Score 60; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21,
21,
26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Fragment).
                                                                                                                                                                                                     ., Thebault R.-G.; EMBL/GenBank/DDBJ-; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
Last annotation update)
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   Score 30;
Pred. No.
                                                                                                        DC2F2385BBFD427B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABF13D0921376295 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 2;
. 6e-50;
   DB 2; L
8.5e-21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
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                                                                                                                                                                                                                                                databases
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                                   Length 99;
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밁 5

Q6XK00;

Matches

TO SEE OF THE PROPERTY OF THE

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RESULT 10
Q5TLE2_BRARE
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Best Local S
Matches 29
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01-FEB-2005
01-FEB-2005
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NON_TER
SEQUENCE
                                                                                   Submitted (NOV-2004) to the EMBL/GenBank/I
EMBL; AB194699; BAD69616.1; -; mRNA.
ZPIN; ZDB-GENE-050201-6; fgf5.
GO; GO:0008083; F:growth factor activity;
InterPro; IPR002209; HB/F growthfact.
InterPro; IPR002348; IL1 HBGF.
Pfam; PP00167; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mulsant P., de Rochambeau H., Thebault R.-G.; Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases. EMBL; AY230009; AAP55850.1; -; mRNA. GO; GO:0008083; F:growth factor activity; IEA. InterPro; IPR002348; IL1_HBGF. PF00167; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2004 (TrEMBLrel. 2
05-JUL-2004 (TrEMBLrel. 2
05-JUL-2004 (TrEMBLrel. 2
Fibroblast growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q5TLE2_BRARE
Q5TLE2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Lagomorpha; Leporid
PRINTS; PR00263; HBGFFGF.
PRINTS; PR00262; IL1HBGF.
ProDom; PD000831; IL1 HBGF.
SMART; SM00442; FGF; I.
                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii;
Cyprinidae; Danio.
CNCBI_TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00167; FGF; 1.
ProDom; PD000831; IL1_HBGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=rex;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oryctolagus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=FGF5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                    "Danio rerio fibroblast growth factor 5 (fgf5) mRNA."; bbmitted (NOV-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                            NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                    Brachydanio rerio (Zebrafish)
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=fgf5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAASLGSQGSGLEQSSFQWSPSGRRTGSLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STHFLPRFKQSEQPELSFTVTVPEKKKPP 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAASLGSQGSGLEQSSFQWSPSGRRTGSLY
                                                                                                                                                                                                                                                                                          SEQUENCE
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(TrEMBLrel.
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                         HBGF; 1.
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27,
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Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                             h) (Danio rerio).a; Craniata; Verte; Teleostei; Osta
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
6.5e-1
                                                                                                                                                                                                                                                                                                                                                                               Vertebrata; Euteleostomi;
Ostariophysi; Cypriniformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.5e-20;
38 0;
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                                                                                                                                                                        RESULT 11
Q4RPO6_TETNG
ID Q4RPO6_T
AC Q4RPO6_T
AC Q4RPO6_T
DT 13-SEP-2
DT 13-S
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A Jailon O., Aury J.M., Brunet F., Petit J.L., Stange-Thomann N.,
A Maucell B., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,
Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,
A Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S.,
A Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,
Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
A Farra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.,
A Farra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.,
A Kellis M., Volff JN., Guigo R., Zody M.C., Mesizov J.,
A Kellis M., Volff JN., Guigo R., Zody M.C., Mesizov J.,
A Kellis M., Schachter V., Quetier F., Saurin W., Scarpelli C.,
A Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
Wincker P., Lander E.S., Weiseenbach J., Roest Crollius H.;
"Genome duplication in the teleost fish Tetraodon nigroviridis reveals
the early vertebrate proto-karyotype.";
                                                                                       Query Match
Best Local Similarity
Matches 19; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q4RPQ6 TETNG |
Q4RPQ6;
13-SEP-2005 (
                                                                                                                                                                             Growth fa
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tetraodon nigroviridis (Green puffer).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom.
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleost.
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEOTIDE SEQUENCE.
Genoscope; Whitehead Institute Centre for Genome Research;
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
-i- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry whi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEOTIDE SEQUENCE
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13-SEP-2005 (TrEMBLrel. 31, Lass
13-SEP-2005 (TrEMBLrel. 31, Lass
13-SEP-2005 (TrEMBLrel. 31, Lass
Chromosome 12 SCAP15007, whole
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                                                                                                                                                                                                                                                                                                              PRINTS; PRO0263; HBGFFGF. PRINTS; PRO0262; IL1HBGF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00247; HBGF_FGF;
                                                                                                                                                                                                                         PROSITE; PS00247; HBGF_FGF; Growth factor.
                                                                                                                                                                                                                                                                  ProDom; PD000831; IL1 HBGF; SMART; SM00442; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR002209; GF_heparin_
InterPro; IPR002348; ILI_HBGF.
Pfam; PF00167; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                    preliminary data.
preliminary data.
L; CAAB01015007; CAG09626.1; -;
L; CAAB01015007; CF heparin_bd.
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                              DDCKFRERFQENSYNTYAS
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    DDCKFRERFQENSYNTYAS
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                                                                                                                                                                             230 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          225 AA;
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                                                                                          Conservative
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Last annotation update)
ole genome shotgun seque
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                                                                                       0,
                                                                                       Score 19; DB; Pred. No. 1e-
0; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
    128
                                           176
                                                                                                                                                                               42BB6EDCE908ECOA CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                            DB 2;
1e-09;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry which
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                                                                                          Indels
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RASULT 13
O13543 YEAST
ID O135437
AC O135437
DT 01-JAN-1
DT 01-JAN-1
DT 01-JAN-1
DT 01-JAN-2
DT 10-MAY-2
DE Y1r294EE
GN CACCharc
OC Eukaryot
OC Saccharc
OC NCBI Tax
RN NUCLEOTI
RX MEDLINE-
RA Johnston
RA Ansorge
RA Johnston
RA Heumann
RA Koetter
RA Moester
RA Moester
RA Moester
RA Mike M.
RA Rinke M.
RA Rinke M.
RA Rinke M.
RA Wambutt
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RI (2)
RP NUCLEOTI
RA Pauley A
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Q8WN07_CANFA
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                                                                                                                                        P NUCLEOTIDE SEQUENCE.

P NUCLEOTIDE SEQUENCE.

A MIDLINE-97313267; pubMed-9169871;

A Johnston M., Hillier L.W., Riles L., Albermann K., Andre B.,

A Johnston M., Hillier L.W., Riles L., Delius H., Dubois E.,

A Ansorge W., Benes V., Brueckner M., Delius H., Dubois E.,

A Duesterhoeft A., Entian K.-D., Floeth M., Goffeau A., Hebling U.,

A Heumann K., Heuss-Neitzel D., Hilbert H., Hilger F., Kleine K.,

A Koetter P., Louis E.J., Messenguy F., Mewes H.-W., Miosga T.,

A Moestl D., Mueller-Auer S., Nentwich U., Obermaier B., Piravandi E.

Pohl T.M., Portetelle D., Purnelle B., Rechmann S., Rieger M.,

ARINKe M., Rose M., Scharfe M., Scherens B., Scholler P., Schwager

RA Schwarz S., Underwood A.P., Urrestarazu L.A., Vandenbol M.,

Verhasselt P., Vierendeels F., Voet M., Volckaert G., Voss H.,

RA Mambutt R., Wedler E., Wedler H., Zimmermann P.K., Zollner A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Olis43 YBAST PRELIMINARY;
Olis43;
Olis43;
Olis40 (Tremblrel. Os,
Olis40 (Tremblrel. Os,
Olis40 (Tremblrel. Os,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cartwright J.M.;
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF453760; AAL50825.1; -; Genomic_DNA.
HSSP; P08620; IJJT.
Ensembl; ENSCAFG00000008885; Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2002 (TrEMBLrel. 20, 01-MAR-2002 (TrEMBLrel. 20, 01-OCT-2003 (TrEMBLrel. 25, Fibroblast growth factor 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q8WN07_CANFA PRELIMINARY;
Q8WN07;
Q1-MAR-2002 (TrEMBLrel. 2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Saccharomyces cerevisiae (Baker's yeast).

Bukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;

Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Name=FGF-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OrderedLocusNames=YLR294C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProDom; PD000831; IL1_HBGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ylr294cp (YLR294C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GO; GO:0008083; F:growth factor InterPro; IPR002348; IL1_HBGF. Pfam; PF00167; FGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE
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                               NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=4932;
                                                                                     nucleotide sequence re 387:87-90(1997).
                                                                                                                                     J., Hoheisel J.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        72
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                               SEQUENCE
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llarity 100.0%;
Conservative
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                                                                                                           of Saccharomyces cerevisiae chromosome
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          940B9B02538C38CF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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                                                                                                                                                                                                                                                                                                                                                 Kleine K.,
                                                                                                                                                                                                                                                                                                    Piravandi E.,
                                                                                                                                                                                                                                                 Schwager
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RESULT 14
Q7YOC1 ORYSA
ID Q7YOC1_ORYSA PRELIMINARY;
AC Q7YOC1;
DT 01-OCT-2003 (TrEMBLrel. 2)
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Matches 10
Query Match
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Matches 10
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Marsischky G., Rolfs A., Richardson A., Kane M., Baqui M., That and the second of the second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-OCT-2003 (TrEMBLrel. 25, Creat 01-OCT-2003 (TrEMBLrel. 25, Last 01-MAR-2004 (TrEMBLrel. 26, Last Putative Dof zinc finger protein. Name=OSJNBa079B15.26;
                                                                                                                                                                                                                                                                                                                                                            Buell C.R., Yuan Q., Ouyang S., Liu J., Ganberger K., Jones K. Overton II L.L., Tsitrin T., Kim M.M., Bera J.J., Jin S.S., Overton D.W., Tallon L.J., Koo H., Zismann V., Hsiao J., Blunt Vanaken S.S., Riedmuller S.B., Utterback T.T., Feldblyum T.V., Yang Q.Q., Haas B.J., Suh B.B., Peterson J.J., Quackenbush J., White O., Salzberg S.L., Fraser C.M.;
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oryza sativa (japonica cultivar-group).
Bukaryota; Viridiplantae; Streptophyta; En
Spermatophyta; Magnoliophyta; Liliopsida;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Complete proteome. SEQUENCE 109 AA;
                                                                                       Pfam; PF02701; zf-Dof; 1.

PROSITE; PS01361; ZF_DOF_1;

PROSITE; PS50884; ZF_DOF_2;

SEQUENCE 349 AA; 35653 MM
                                                                                                                                                                                                     Gramene; Q7Y0C1; -.
GO; GO:0003677; F:DNA binding;
                                                                                                                                                                                                                                               Submitted (JUN-2003) to the EMBL; AC099043; AAP50963.1;
                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE.
Buell R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (FEB-2004) to the EMBL/GenBank/DDBJ EMBL; U17243; AAB67352.1; -; Genomic DNA. EMBL; AY558218; AAS56544.1; -; Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=39947;
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                                                                                                                                                                                interPro;
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RESULT 15

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AC Q54TY7, DICDI PRELIMINARY;
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DE MADS-DOS (TREMBLREL. 
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Slogang R., Berriman M., Song J., Olsen R., Szafranski K., Xu Q.,
RA Tunggal B., Kummerfeld S., Madera M., Konfortov B.A., Rivero F.,
RA Tunggal B., Kummerfeld S., Madera M., Konfortov B.A., Rivero F.,
RA Hunggal B., Kummerfeld S., Madera M., Konfortov B.A., Rivero F.,
RA Bankier A.T., Lehmann R., Hamilin N., Davies R., Gaudet P., Fey P.,
RA Pilcher K., Chen G., Saunders D., Sodergren E., Davis P.,
RA Kerhornou A., Nie X., Hall N., Anjard C., Rost R., Churcher C.,
RA Kerhornou A., Nie X., Hall N., Anjard C., Hemphill L., Bason N.,
RA Kerhorther P., Desany B., Just E., Morio T., Rost R., Churcher C.,
RA Cooper J., Haydock S., van Driessche N., Cronin A., Goodhead I.,
RA Muzny D., Mourier T., Pain A., Lu M., Harper D., Lindsay R.,
RA Muzny D., Mourier T., Pain A., Lu M., Harper D., Lindsay R.,
RA Muzny D., Mourier T., Pain A., Lu M., Harper D., Knights A.,
RA Wardroper A., Felder M., Thangavelu M., Johnson D., Knights A.,
Coulseged H., Mungall K., Oliver K., Price C., Quail M.A.,
Urushihara H., Hernandez J., Rabbinowitsch E., Steffen D., Sanders M.,
RA J., Kohara Y., Sharp S., Simmonds M., Spiegler S., Tivey A.,
RA Sugano S., White B., Walker D., Woodward J., Winckler T., Tanaka Y.,
RA Sugano S., White B., Walker D., Woodward J., Winckler T., Tanaka Y.,
RA Sugano S., White B., Walker D., Woodward J., Kuspa A.,
"The genome of the social amoeba Dictyostelium discoideum.";
RL Nature 0.0-0 (2005).

CC C. The Backloba Whole genome shotgun (WGS) entry which is
CC C. The Chullon of the social amoeba Boutyostelium discoideum.";
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Best Local Similarity
Matches 10; Conserv
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EMBL; AAFI01000074; EAL66675.1; -; Genomic_DNA.

GO; GO:0005634; C:nucleus; IEA.

GO; GO:0003700; F:transcription factor activity; IEA.

GO; GO:0003700; F:regulation of transcription, DNA-dependent; IEA.

DNA-binding; Nuclear protein; Transcription; Transcription regulat

SEQUENCE 418 AA; 47546 MM; 8C86042A75C82DBA CRC64;
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Dictyostelium discoideum (Slime mold).
Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium
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13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
MADS-box transcription factor.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	0	ທ	4	ω	2	<u>,,</u>	Result No.
226	226	226	226	226	226	226	226	226	226	246	268	268	268	268	268	268	268	268	268	268	268	268		Score
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45 151														31 182						
56.3	56.3	56.3	56.3	62.3	65.7	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	72.8	72.8
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Aaw53031	Abg72713	Abg73848	Aay87852	Aar75703	Aae00637	Adm94750	Abb99124	Aae18810	Aab50277	Aag65651	Aae00645	Aab50709	Aaw22600	Aar48064	Aap82964	Abg72719	Abg74160	Aay87858	Aae00642	Aae00640
Fibroblas	Recombina	Human fib	Human FGF	Human FGF	Human fib	Human fib	Human fib	Human FGF	Human FGF	Human fib	Human fib	Human fib	Human fib	FGF-3 cDN	Encoded b	Recombina	Human fib	Human FGF	Human fib	Human fib

ALIGNMENTS

FGF-5; fibroblast growth factor; cytotoxic conjugate; fusion protein; saporin; cytostatic; tumor; diabetes; rheumatoid arthritis.

FGP-5.

25-MAR-2003 01-SEP-1995 AAR70813;

(revised) (first entry)

RESULT 1
AAR70813
ID AAR7

AAR70813 standard; protein; 268 AA

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New monogenous preparations of cytotoxic conjugates and DNA - confibroblast growth factors and cytotoxic agents for treating FGF conditions such as tumours, diabetes and rheumatoid arthritis.
                                                                                                                                                                                                                           /note= "Cys may be replaced by Ser" Misc-difference 93
                                                                                  Sosnowski BA,
                                                                                                                           02-AUG-1993;
29-OCT-1993;
                                                                                                                                                                    09-FEB-1995.
                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                  WPI; 1995-082038/11.
                                                                                                                                                   27-JUL-1994;
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                                                                                                 (PRIZ-) PRIZM PHARM INC.
(WHIT-) WHITTIBR INST DIABETES & ENDOCRINOLOGY.
                                                                                 Lappi DA,
                                                                                                                          93US-00099924.
93US-00145829.
                                                                                                                                                   94WO-US008511.
                                                                                                                                                                                                    /note= "Cys may be replaced by Ser"
202
/note= "Cys may be replaced by Ser"
                                                                                  Baird AJ;
                                                  contain
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Novel fusion proteins comprise FGF linked to saporin. FGF-1 to -9 may be

Disclosure; Page 112; 128pp; English.

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                                                                                                                                                                                                                                                                                                          cell proliferation; regulation; pterygia; corneal clouding; cancer; psoriasis; rheumatoid arthritis.
AAR80776-84 are fibroblast growth factors (FGF) FGF-1 to FGF-9 respectively. DNA encoding these fibroblast growth factors can create an FGF/saporin fusion protein. DNA encoding such fusion
                                                                  New conjugates of growth factor receptor ligand and targetted partic. DNA or cytotoxin, used to control cell proliferation i e.g. to prevent growth of pterygii and corneal clouding.
                                                                                                                                                                                        15-MAR-1994;
15-MAR-1994;
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                                                                                                                    WPI; 1995-336820/43.
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Pred. No. 8.6e-250;
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; thromocytopenia; ophthalmic disorder; human; therapy.
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                                                   /note= "Asn-169 may be replaced by (Claim 2), preferably Ala, Phe, Ser Tyr, especially Ala, Gly or Ser" 172
                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                (Claim 3), preferably Ala, Phe, Tyr, especially Ala, Gly or Ser 164
                                                                                                                                                                                          (Claim 7),
                                                                                                                                                                                                                                                                                                      /note= "Phe-162 is replaced by another amino (Claim 3), preferably Ala, Phe, Ser, Gly, Met
                                                                                                                                                                                                                         note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      factor-5
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                                                                                                                                                                                       "Glu-164 may be replaced by 7), preferably Ala, Gly or 9
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Pred. No. 8.6e-250;
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Misc-difference

/note= "Asn-172 may be replaced
(Claim 1), preferably Ala, Phe,

by another amino ac Ser, Gly, Met, Leu

acid eu or

Ala, Phe, Ser,

Leu

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Best Local S
Matches 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This is the amino acid sequence of fibroblast growth factor-5 (FGF-5). Claimed DNA molecules of the invention encode FGF mutein polypeptides (see AAW75711-20) that show reduced FGF receptor binding activity but which retain the ability to bind heparin. For FGF-5, amino acid residues 162, 169 and 172 are preferably replaced by other amino acid residues, with an optional further replacement of the Glu-164 residue. The mutein may be further modified by replacement of the Cys residues to reduce aggregation. The mutein is obtained by site-specific or site-directed mutagenesis of FGF-5 DNA, incorporation of the mutated DNA into a vector and expression in host cells. The FGF muteins are used to treat heparin-related disorders, such as excessive bleeding induced by heparin, ophthalmic disorders and heparin-associated thrombocytopenia and thrombosis. They may also be used for drug design
               Human FGF-5 protein fragment
                                               05-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 55-56; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fibroblast growth factor mutein and DNA - having reduced receptor binding and able to bind heparin, useful for treating and regulating heparin-related disorders e.g. thrombosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-495843/42
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                                                                                                           protein; 268
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                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes a novel human fibroblast growth factor, PRO533, also known as fibroblast growth factor-19 (FGF-19). The nucleic acids, methods and PRO533 polypeptides disclosed may be used in the diagnosis and treatment of tumours and/or conditions characterized by modulation of PRO533 expression, or in the preparation of compositions for such the therapies. These compositions and methods may be used in the diagnosis and treatment of neoplastic cell growth and proliferation in mammals (especially humans). The invention is based on the identification of genes that are amplified in the genome of tumour cells. Such gene amplification is expected to be associated with the over expression of the gene product and contribute to tumourgenesis and/or autocrine signalling. Accordingly, the proteins encoded by the amplified genes are believed to be useful targets for the diagnosis and/or treatment of certain cancers and may act as predictors of the prognosis for tumour certain cancers and may act as predictors of the prognosis for tumour
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 268
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21-SEP-1998;
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SPIKSKIPLSAPRKNTNSVKYRLKFRFG
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Pred. No. 8.6e-250;
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                                                                                                                                                 This sequence represents human fibroblast growth factor 5 (FGF-5). The CC invention relates to isolated nucleic acids encoding FGF mutein CC polypeptides. FGF muteins that exhibit increased binding affinity for FGF CC receptors and reduced mitogenic activity are provided. Such muteins have amino acid replacements at positions corresponding to position 138 (claim CC 1) of FGF-2 (see AAY3234). They can be used to prevent or inhibit the CC undesired growth and proliferation of FGF-responsive cells. Such cells CC ccur in vascular disorders characterised by accelerated smooth muscle CC (Kaposi's sarcoma, restenosis, in-stent restenosis, certain ophthalmic CC (Kaposi's sarcoma, restenosis, in-stent restenosis, certain ophthalmic CC disorders and dermatological disorders, such as psoriasis. Also provided are FGF muteins that exhibit reduced receptor binding activity, but CC replacements corresponding to positions 88 (claim 5) and 93 (claim 7) and CC menarin position 96 of FGF-2. They can be used as coagulants for CC heparin-associated bleeding, antagonists of heparin-induced angiogenesis, and for treating heparin-induced thrombocytopenia and thrombosis. In CC greferred muteins, the native FGF amino acid is replaced by Ala, Phe, CC Cly, Ser, Met or Tyr, especially Ala, Gly or Ser, and particularly Ala. CC Cys residues may also be substituted to reduced polypeptide aggregation
                                                            Query Match
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Matches 268
                                                                                                                             Sequence 268
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mutein of Claim 1"
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                                                          Score 268; DB 3;
Pred. No. 8.6e-250;
Mismatches 0;
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15-MAR-1994;
29-AUG-1994;
13-SEP-1994;
The invention relates to a novel gene delivery composition for the targetted delivery of cytotoxins or prodrug-converting enzymes to proliferating cells. The gene delivery composition comprises a protein that binds the fibroblast growth factor receptor (FGFR) which is fused or chemically conjugated to a nucleic acid binding domain. The nucleic acid binding domain is complexed with a suitable expression construct encoding a cytotoxin such as saporin. One or more linkers may join the FGFR-binding protein to the nucleic acid binding protein. These are selected to increase the specificity, toxicity, solubility, serum stability or intracellular availability, and may serve to promote condensation of nucleic acids for delivery to a cell. The fusion protein binds to FGFR and is internalised by cells that carry this receptor. The gene delivery
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene delivery system, useful for treating or preventing cancer and rheumatoid arthritis, comprises receptor-internalized ligand linked nucleic acid binding domain and nucleic acid.
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94US-00213447.
94US-00297961.
94US-00305771.
95US-00441979.
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                                                                                                                                                                                                                                                                                                                                                                                                     Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; fibroblast growth factor-5; FGF-5; neoplasm; cytostatic; renal cell carcinoma; immunomodulator; gene therapy; carcinoma; prostate; bladder; pancreas; TAA; tumour associated antigen; MUS prostate; bladder; pancreas; TAA; tamour associated cystic deliberable kidney; Hippel-Lindau disease; acquired renal cystic deliberable kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human MUSFGF5A protein of second open reading frame
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                                                                            02-OCT-1999;
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   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
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                                                                        99US-0157103P
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                                                                                                                                                                                                                                                                                                                                                               Immunogenic_epitope
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ic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    breast;
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Consequence is a protein encoded by the second open reading a subject having conceptame expressing fibroblast growth factor-5 (FGF-5) comprises commodulating an immune response to FGF-5 expression or activity. FGF is a tumour associated antigen (TAA). The method is useful for cureating or preventing a neoplasm such as prostate carcinoma, breast carcinoma, bladder carcinoma, pancreas carcinoma, and renal cell carcinoma (RCC) and diseases such as Hippel-Lindau disease, horseshoe kidneys, adult polycystic kidney disease and acquired renal cystic cidneys, adult polycystic kidney disease and acquired renal cystic cidneys. FGF-5 polypeptides may be used as immunogen in the production of antibodies, which are useful in quantitative immunossasys that determine concentrations of antigen-bearing substances in biological samples, and to (semi-)quantitatively identify the presence of antigen in a biological sample. The antibodies may also be used to treat FGF-5 expressing or coverexpressing tumours by decreasing FGF-5 activity, as diagnostic agents of meoplasm. FGF-5 cDNA is also useful in gene therapy for the treatment of neoplasm. FGF-5 cDNA is also useful in gene therapy. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treating a subject having a neoplasm expressing fibroblast growth factor-5 (FGF-5), e.g. prostate, breast, bladder, or pancreas carcinoma, comprises modulating an immune response to FGF-5 or modulating FGF-5 expression or activity.
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 7; Page 87-88; 101pp; English.
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                                                 MUSFGF-5A cDNA
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Local Similarity 100.0%;
les 268; Conservative 0 241 181 181 121 121 61 61 ,_ \vdash MSLSFILLLEFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS SSPAASIGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS SPIKSKIPLSAPRKNTNSVKYRLKFRFG TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR LEIFAVSQGTVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP 0 Score 268; DB 4; Pred. No. 8.6e-250; Mismatches 0; Length 268; Indels 0 Gaps 180 180 120 240 120 60 60

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RESULT 8
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   Human; zFGF10; fibroblast growth factor-5; FGF-5; antiatherosclerotic; vasotropic; anorectic; antipsoriatic; antidiabetic; cerebroprotective; cytostatic; vulnerary; diabetes mellitus; amyotrophic lateral sclerosi
                                                                        Human
                                                                                                        04-SEP-2001
                                                                                                                                                                             AAE04405
                                                                      fibroblast growth factor-5 (FGF-5).
                                                                                                                                                                             standard;
                                                                                                        (first entry)
                                                                                                                                                                         protein;
amyotrophic lateral sclerost
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241

SPIKSKIPLSAPRKNINSVKYRLKFRFG

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CC neuropathy associated with lack of maintenance of neuronal development. zFGF-10 sequences are used for promoting CC anglogenesis and wound healing, for revascularisation in the eye, for CC complications related to poor circulation such as diabetic foot ulcers, for stroke, following coronary reperfusion and for improving cardiac CC function. They are used to protect and promote the recovery of the CC epithelial cells in the gastrointestinal tract, small intestine and oral CC mucosa after treatment with chemotherapy and/or radiation and to reduce CC damage to the tissues caused by ischaemia or ischaemia reperfusion CC events, particularly in the heart or brain. They are also used for the induction of skeletal muscle neogenesis and/or hyperplasia, kidney CC regeneration and/or for treatment of systemic and pulmonary hypertension. CC zFGF-10 proteins are used for stimulating proliferation of mesenchymal CC cells, epidermal cells or keratinocytes. The zFGF-10 antagonists are used CC are useful for treating neuroblastoma, glioblastoma, prostatic CC are useful for treating neuroblastoma, glioblastoma, prostatic CC Mypertrophy, prostatic carcinoma and pancreatic carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is fibroblast growth factor-5 (FGF-5) from human. This protein is a member of the FGF family. The present invention relates to novel human zegrel0 protein and its DNA. zFGF-10 is a homologue of fibroblast growth factor (FGF). The zFGF10 sequences and their antibodies are useful for identifying and isolating neuronal, prostatic and pancreatic cell proliferation. They are used in the treatment of disorders associated with diabetes mellitus, neural cell development or degeneration, amyotrophic lateral sclerosis, cerebro-vascular stroke,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapy; cerebrovascular stroke; neuropathy; angiogenesis; wound healing; revascularisation; diabetic foot ulcer; stroke; coronary reperfusion; ischaemia; hypertension; psoriasis; neuroblastoma; glioblastoma; carcinoma; prostatic hypertrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 268
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel fibroblast growth factor homolog, zFGF10, useful for treating psoriasis, stimulating proliferation of mesenchymal cells, keratinocytes in culture, promoting wound healing of epidermis, improving cardiac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-418223/44.
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100.0%; Pred. No. 8.6e-250;
                                                                                                                                                        LEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
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                                                                                                                                                                                                               Query Match
Best Local S
Matches 268
                                                                                                                                                                                                                                                                                             The present invention provides the protein and coding sequences for human fibroblast growth factor 11 (FGF-11). These sequences can be used in the diagnosis and treatment of infections, cancer, autoimmune disorders, hyperproliferative disorders, cardiovascular disorders and neurological diseases, to prevent angiogenesis and to aid wound healing
                                                                                                                                                                                                                                                                                                                                                                                                      Polymucleotide encoding human fibroblast growth factor 11, useful diagnosis, treatment and prevention of cancer, immune disorders, cardiovascular disorders and neurological diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; fibroblast growth factor 11; FGF-11; cancer; autoimmune disorder; hyperproliferative disorder; cardiovascular disorder; angiogenesis; wound healing; neurological disease; infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB50701
                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 243-244; 250pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rosen CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-MAY-2000; 2000WO-US013331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                             Local Similarity
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                                                                   LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                        SSPAASLGSQGSGLEQSSPQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                             MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
                                                                                                                                                                                     MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
                                                                                                                                                                                                                                                                     268 AA;
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               TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP
                                                   LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                       SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANWLSV
TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP
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                                                                                                                                                                                                                  Conservative
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Pred. No. 8.6e-250;
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Best Local :
                                                                                                                                                                                                                    Matches 268;
                                                                                                                                                                                                                                                                                                                                       The invention provides a human fibroblast growth factor (FGF)-23 polypeptide. The encoding DNA insert is contained in ATCC Deposit No. PTF-1617. FGF-23 can be expressed by standard recombinant methodology. The FGF-23 polypeptides, polynucleotides, modulators and antibodies are useful for treating, preventing, or ameliorating an FGF-23 polypeptide-related disease, condition or disorder especially autosomal dominant hypophosphatemic rickets (ADHR). They are also useful for diagnosing a pathological condition and for stimulating angiogenesis, promoting wound healing and treating disorders of the liver. Sequences AABS-812-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200161007-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fibroblast growth factor; FGF; FGF-23; osteopathic; vulnerary; ADHR; hepatotropic; autosomal dominant hypophosphatemic rickets; human; angiogenesis; gene-therapy; liver disorder; antisense-therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human fibroblast growth factor (FGF)-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB85816 standard; protein; 268
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20-APR-2000; 2000US-0198903P.
15-FEB-2001; 2001US-00784581.
                                                                                                                                                                                                                                                                                Sequence 268 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     An isolated nucleic acid molecule encoding a fibroblast growth factor useful for treating autosomal dominant hypophosphatemic rickets.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-514774/56.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-AUG-2001.
                                                                                                                                                                                                                                                                                                                             represent human FGF protein sequences used for comparison studies with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1;
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                                                                                                                                                                                                                                    Local Similarity
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                                                                                                                                                                           MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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                                                     LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                        SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP
                              LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                         SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                      MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fig 2A-G; 158pp; English.
                                                                                                                                                                                                                    Conservative
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Pred. No. 8.6e-250;
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The invention discloses a gene delivery composition comprising a colypeptide that binds to a fibroblast growth factor (FGF) receptor-composition decided molecule is chemically conjugated or fused to the polypeptide that binds to an FGF receptor. The delivery composition binds to an FGF receptor and is internalised specifically in CC cells bearing the FGF receptor. The invention relates to the treatment CC (e.g., gene therapy) of diseases (e.g., hyperproliferative disorders and CC neoplastic diseases) and, more specifically, to the preparation and use of complexes containing receptor-binding internalised ligands, nucleic caid binding domain (NABD) and cytocide-encoding agents to alter the CC function, gene expression or viability of a cell in a therapeutic manner. CC manisense molecule. The cytocide-encoding agent, a ribozyme or an antisense molecule. The cytocide-encoding agent, a ribozyme or an antisense molecule. The cytocide-encoding agent on diptheria toxin. CC inactivating protein, preferably a saporin, gelonin or diptheria toxin. CC inactivating protein, preferably a saporin, gelonin or diptheria toxin. CC talso encodes lits elongation factor 2 and further comprises a tissue-specific promoter operably linked to the molecule. The produng-encoding agent encodes a The produng-encoding agent encodes a polypeptide polypeptide, FGF-8 polypeptide, FGF-9 polypeptide or FGF-9 polypeptide, FGF-9 polypeptide, FGF-9 polypeptide or FGF-9 polypeptide, FGF-9 polypeptide, FGF-9 polypeptide or FGF-9 polypeptide, FGF-9 polypeptide or FGF-9 polypeptide.
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13-SEP-1994;
16-MAY-1995;
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15-MAR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human fibroblast growth factor 5 (FGF-5) protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gene delivery composition for therapeutic treatments, comprises polypeptide that binds to fibroblast growth factor receptor-nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-NOV-1999;
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94US-00213447.
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94US-00305771.
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Best Local Similarity
Matches 268; Conserv
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13-SEP-1994;
16-MAY-1995;
24-SEP-1996;
24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic; ophthalmological; gene therapy; human; receptor-binding internalised ligand; nucleic acid binding domain; cytocide-encoding agent; cell surface receptor; cell proliferation; cancer; smooth muscle cell hyperplasia; fibroblast growth factor; FGF
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                                                                     New pharmaceutical composition comprising receptor-binding internalized ligand-nucleic acid binding domain-cytocide-encoding agent, useful for preventing excessive cell proliferation in the eye or for treating e.g.
    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                15-MAR-1994;
15-MAR-1994;
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94US-00297961.
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Pred. No. 8.6
D; Mismatches
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1.6e-250;
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CC binding internalised ligand-nucleic acid binding domain-cytocide-encoding
CC agent. The receptor-binding internalised ligand is a polypeptide reactive
CC with a cell surface receptor. The nucleic acid binding domain binds to a
CC nucleic acid and is chemically conjugated or fused to the receptor-
CC binding internalised ligand. The cytocide-encoding agent is a nucleic
CC acid molecule encoding a cytocide and is bound to the nucleic acid
CC binding domain. The receptor-binding internalised ligand-nucleic acid
CC binding domain-cytocide-encoding agent binds to the cell surface receptor
CC and internalises the cytocide-encoding agent in cells bearing the
CC receptor. The pharmaceutical composition is useful for preventing
CC excessive cell proliferation in the eye or for treating cancer or smooth
CC muscle cell hyperplasia. This is the amino acid sequence of a fibroblast
CC growth factor (FGF) that can be modified and used as a receptor binding
CC ligand of the invention.
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Best Local Similarity
Matches 268; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunogenic peptide; fibroblast growth factor-5; FGF-5; renal cell carcinoma-associated antigen; immune response; antibody; antigen; human leukocyte antigen-A2; HLA-A2; renal cell carcinoma; adenocarcinoma.
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Pred. No. 8.6e-250;
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Hanada

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Yang JC,

Perry-Lalley D

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RESULT 14
AAE00639
ID AAE00
XX AAE00
XX AAE00
XX D7 02-JU
XX Humar
XX Humar
XX Fenall
XW Prost
KW horse
KW horse
KW adult
XX
PD WO20
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PD 12-A
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Best Local Similarity
Matches 268; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents fibroblast growth factor-5 (FGF-5). FGF-5 is a renal cell carcinoma-associated antigen. Peptide fragments derived from FGF-5 were used to elicit an immune response in a subject, by administering to a subject a first dose of a therapeutic amount of the peptide. They may also be used for treating a FGF-5 expressing tumour in a subject and for generating antibodies specific for an FGF-5 antigen. In eliciting an immune response in a subject, the immune response elicited is against an FGF-5 human leukocyte antigen (HLA)-A2 epitope, and the peptide comprising ADS20325 is administered resulting in elicitation of the immune response against the FGF-5 HLA-A2 epitope. The method elicits an immune response against the renal cell carcinoma. The subject has an FGF-5 expressing tumour, particularly an adenocarcinoma or renal cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human leukocyte antigen (HLA)-A3 and HLA-A2 epitopes of fibroblast growth factor-5 (FGF-5) for eliciting an immune response in a subject for treating an FGF-5 expressing tumor, e.g. renal cell carcinoma.
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N-PSDB; ADS20333.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 268 AA;
                                                                                                                                  renal cell carcinoma; immunomodulator; gene therapy; carcino prostate; bladder; pancreas; TAA; tumour associated antigen; horseshoe kidney; Hippel-Lindau disease; acquired renal cyst adult polycystic kidney disease; clone 6A4-1.
                                                                                                                                                                                                                                                     Human fibroblast growth factor-5 (FGF-5) peptide #1 from clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; SEQ ID NO 16; 89pp; English
                                                                                                                                                                                                                                                                                             02-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                        AAE00639 standard; peptide; 246 AA
                        12-APR-2001
                                                                                                Homo sapiens
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                                                                                                                                                                                                                 fibroblast growth factor-5; FGF-5; neoplasm; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LETFAVSQGTVGTRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASATHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SSPAASIGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB06463.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPIKSKIPLSAPRKNTNSVKYRLKFRFG 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSPTVTVPEKKNPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MSLSFLLLLFFSHLILSAWAHGEKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPP
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                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 268; DB 8; 100.0%; Pred. No. 8.6e-250;
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                                                                                                                                                                                               carcinoma;
                                                                                                                                                            cystic disease
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                                                                                                                                                                                                 breast;
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AAY31793
ID AAY3
XX
AC AAY3
XX
DT 06-I
XX
DB Huma

AAY31793 standard;

protein;

262 180 120 142 60

06-DEC-1999

(first entry)

Human fibroblast growth factor 5 mature polypeptide.

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N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treating or preventing a neoplasm such as prostate carcinoma, breast carcinoma, bladder carcinoma, pancreas carcinoma, and renal cell carcinoma (RCC) and diseases such as Hippel-Lindau disease, horseshoe kidneys, adult polycystic kidney disease and acquired renal cystic disease. RGF-5 polypeptides may be used as immunogen in the production of antibodies, which are useful in quantitative immunoassays that determine concentrations of antigen-bearing substances in biological samples, and to (semi-)quantitatively identify the presence of antigen in a biological sample. The antibodies may also be used to treat FGF-5 expressing or overexpressing tumours by decreasing FGF-5 activity, as diagnostic agents to monitor the progression or regression of an FGF-5 expressing or overexpressing tumour in a patient undergoing therapy for the treatment of neoplasm. FGF-5 cDNA is also useful in gene therapy. The present sequence is a human FGF-5 peptide from clone 6A4-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to a method for treating a subject having neoplasm expressing fibroblast growth factor-5 (FGF-5) comprises modulating an immune response to FGF-5 or FGF-5 expression or activity. FGF is a tumour associated antigen (TAA). The method is useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Treating a subject having a neoplasm expressing fibroblast growth factor-5 (FGF-5), e.g. prostate, breast, bladder, or pancreas carcinoma, comprises modulating an immune response to FGF-5 or modulating FGF-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression or activity.
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DB; AAD03937.
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                                                                                                                                                                                                                                                                                                                                                                  23 EKRLAPKGOPGPAATDRNPIGSSSROSSSSAMSSSSAASSSPAASLGSOGSGLEOSSPOWS
                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                          LKFRFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            246 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 92; 101pp; English
                                                                                                         SPRVKPQHISTHFLPRFKQSEQPELSPTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYR
                                                                                                                                                                                                                                                                     PSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFL
LKFRFG
                                                                                SPRVKPQHISTHFLPRFKQSEQPELSFTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYR
                                                                                                                                                              AMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGC
                                                                                                                                                                                     AMSKKGKLHASAKFTDDCKFRERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGC
                                                                                                                                                                                                                                              PSGRRTGSLYCRVGIGFHLQIYPDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFL
                                                                                                                                                                                                                                                                                                                            EKRLAPKGQPGPAATDRNPIGSSSRQSSSSAMSSSSASSSPAASLGSQGSGLEQSSFQWS
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                                        268
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100.0%; Pred. No. 1.4e-228;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 246;
                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                            0;
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Query Match
Best Local S
Matches 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or (b) supportive cells selected from Muller cells and pigment epithelial cells. The method is used to treat photoreceptor cell injury or death caused by an ocular disease, retinal injury, light or environmental trauma. The ocular disease is especially selected from: retinitis pigmentosa; macular degeneration, including age-related; retinal detachment; retinal tears; retinopathy; retinal degenerative diseases; macular holes; degenerative moppla; acute retinal necrosis syndrome; traumatic chorioretinopathies or contusion, such as Purtscher's retinal vision occlusion; collagen vascular diseases; thrombocytompenic purpura; uveltis; retinal vasculitis and occlusion associated with Eales disease and systemic lupus erythematosus (all claimed)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pibroblast growth factor 5; PGF-5; human; eye; retina; ocular disease; retinopathy; maculopathy; retinal degeneration; retinitis pigmentosa; macular degeneration; retinal detachment; retinal tear; macular hole; degenerative myopla; acute retinal necrosis syndrome; traumatic chorioretinopathy; Purtscher's retinapathy; oedema; retinal vision occlusion; collagen vascular disease; thrombocytompenic purpura; uveitis; retinal vasculitis; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents human fibroblast growth factor 5 (FGF-5) mature polypoptide. A claimed method of delaying, preventing or rescuing retinal cells from injury or death without causing angiogenesis or mitogenesis comprises administering an active FGF-5 polypoptide such as the present polypoptide. The retinal cells are: (a) retinal neurons selected from photoreceptors, retinal ganglion cells, displaced retinal ganglion cells, amagrine cells, displaced amacrine cells, horizontal and bipolar neurons;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 247 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating ocular diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel method using FGF-5 for preventing retinal neuron death and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-561619/47.
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29-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                         IYDDGKVNGSHEANMLSVLEIFAVSQGIVGIRGVFSNKFLAMSKKGKLHASAKFTDDCKF
                                                                                                                                                                                                                                                                                                                                                                                                GSSSRQSSSSAMSSSSASSSPAASIGSQGSGLEQSSPQWSPSGRRTGSLYCRVGIGFHLQ
                                                                                                                                                            RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                                                                                                                                                                                                                 GSSSRQSSSSAMSSSSAASSSPAASLGSQGSGLEQSSFQWSPSGRRTGSLYCRVGIGFHLQ
EQPELSFTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYRLKFRFG
                                                           EQPELSFTVTVPEKKNPPSPIKSKIPLSAPRKNTNSVKYRLKFRFG 268
                                                                                                                      RERFQENSYNTYASAIHRTEKTGREWYVALNKRGKAKRGCSPRVKPQHISTHFLPRFKQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ilarity 100.0%;
Conservative
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99US-00240952.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.3%; Score 226; DB 2; L
100.0%; Pred. No. 2.7e-209;
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S 밁 δ 밁 ঠ 밁 S Search completed: April 11, 2006, 03:33:13 Job time: 77 secs